Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Prescribing the Authorized	)	CC Docket No. 98-166
Unitary Rate of Return for	)	
Interstate Services of Local	)	
Exchange Carriers	)	
	)	

DIRECT CASE AND COMMENTS OF SBC COMMUNICATIONS INC.

SBC Communications Inc. (SBC), on behalf of Southwestern Bell Telephone Company (SWBT), Pacific Bell (Pacific), and Nevada Bell (Nevada) (collectively, the SBC Companies), and pursuant to the Notice Initiating A Prescription Proceeding And Notice Of Proposed Rulemaking (Notice) released October 5, 1998[1] by the Federal Communications Commission (Commission), hereby submits its Direct Case and Comments in the above styled matter.

None of the SBC Companies is subject to rate-of-return regulation and would not normally have a direct interest in the authorized rate of return. Nevertheless, SBC believes that it is compelled to participate in the Direct Case phase of the proceeding given the Notice's tentative conclusion that the low end adjustment mechanism for price cap carriers should also be changed in lockstep with the authorized rate of return. Thus, the first portion of this pleading addresses the reasons why the authorized rate of return should not be reduced, and the second portion describes why the low end adjustment formula should not, in any event, be triggered at a rate of return less than 10.25%.

[1] Prescribing the Authorized Unitary Rate of Return for Interstate Services of Local Exchange Carriers, CC Docket No. 98-166, Notice Initiating A Prescription Proceeding And Notice Of Proposed Rulemaking, (FCC 98-222) (rel. October 5, 1998). (Notice)

I. DIRECT CASE

A. THE AUTHORIZED RATE OF RETURN SHOULD NOT BE REDUCED.

The Notice determines that it is appropriate to launch a rate-of-return proceeding at this time, because "[t]he sustained low yields of the U.S. treasury securities strongly suggest that the current prescribed rate of return is much higher that the rate required to attract capital and earn a reasonable profit."[2] SBC believes that the Notice incorrectly reads the facts of today's capital markets and the competitive landscape.

Indeed, if the Commission should act in this proceeding at all, it should increase the prescribed rate of return. The comments being filed by the U.S. Telephone Association demonstrate that the current authorized interstate rate of return of 11.25% is only a conservative estimate of all LECs' current and prospective capital costs.[3] These costs reflect the high levels of risk that LECs face in today's telecommunications marketplace. The current authorized rate of return should thus be considered a lower bound for any represcription.

LECs continue to face increasing competitive, regulatory and technological risk and uncertainty in their core business of providing local exchange and exchange access service.[4] As a result, LECs must obtain larger portions of their capital through equity funding, and at higher cost than would be the case otherwise. At the same time, debt cost financing has not fallen as much as Treasury bond rates have fallen, due to circumstances unique to the decline in interest rates for Treasury securities.

As Dr. Avera states in the USTA Comments, a lowering of the authorized rate of return would adversely affect the public interest because the financial markets view the authorized rate of return as a primary indication of the Commission's prospective regulatory treatment of the LECs. A lower, inadequate, authorized rate of return would increase the risks and uncertainties

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[2] Notice, at para. 5.

[3] Comments of USTA, being filed this same date, at Dr. William E. Avera's comments.

[4] Attached as Appendix A are pages 3-7, and Appendix C, of SBC's Reply Comments filed November 9, 1998 to refresh the record in the Access Reform dockets. This material demonstrates the extensive entry into local markets by competitors.

that LECs face. All LECs, including price cap LECs, would suffer from decreased capital availability as a result of such a Commission action, which would be perceived as adverse to potential investors. With insufficient capital, LECs will be less able to invest in the infrastructure needed to bring advanced services to their customers. Of course, this would be contrary to the intent of section 706 of the Act, as well as the Commissions' recent proceeding on advanced services (CC Docket No. 98-147), and thus be contrary to the public interest.

Consistent with Dr. Avera's testimony, the Commission should not conduct a full-blown represcription proceeding. Rather, the Commission's resources are best devoted to resolving other issues (such as the outstanding issues in the Universal Service proceedings), thereby reducing the regulatory risks of incumbent LECs. Nevertheless, if the Commission chooses to pursue this proceeding in detail, the authorized rate of return should be increased.

B. THE AUTHORIZED RATE OF RETURN MUST PROPERLY WEIGH COMPETITIVE AND REGULATORY RISKS.

The Notice tentatively concludes that: "The RBOCs and rate-of-return ILECs both provide interstate services, their primary business is still the provision of telephone service and neither is subject to any meaningful competition for regulated telecommunications services in their service area."[5] This tentative conclusion is just plainly wrong. Chairman Kennard's recent statement on the FCC's agenda belies the tentative conclusion: "in every sector, there are now more telecommunications competitors, more new services available to consumers, and more of both on the way."[6] Chairman Kennard thus acknowledges that competitive risks for LECs have grown substantially over the past eight years.

As competitive risks grow, cost of capital increases. Since the last represcription, the Telecommunications Act of 1996 opened to competition those LEC markets that previously were subject to exclusive regulatory franchises. As a result, interexchange carriers (IXCs) have chosen to enter exchange access markets very selectively, using special access arrangements to

[5] Notice at para. 20.

[6] "Chairman Kennard's Agenda for the FCC for 1999," released on the Commission's web site (http://www.fcc.gov/Speeches/Kennard/Statements/stwek901.html) on January 7, 1999.

gain the LECs' most financially desirable high-volume business customers.[7] At the same time, these carriers attempt to use the regulatory process to achieve overall access charge reductions where they choose not to compete. An inadequate prescribed rate of return would only reinforce this strategic behavior by confirming that investment in exchange access markets should be avoided.

The implementation of the 1996 Act has also increased the regulatory risks to the LECs. The Commission's decisions regarding interconnection, unbundling and reciprocal compensation, as well as the fundamental changes being implemented in the Commission's access charge and universal service systems are all examples of increased regulatory risk. Many of these decisions raise risks to the LECs that they may not be able to recover their costs with the same level of certainty as they had in the past.

The continuing rapid pace of technological development also poses substantial risks for LECs. Ongoing progress in technologies that implement Internet telephone, satellite communications and terrestrial wireless communications is straining the technical and regulatory structures on which many LECs depend for a substantial portion of their returns.

In light of this risky environment, the Commission should turn its efforts toward reducing the uncertainties that already exist for LECs, rather than create new uncertainties in a represcription proceeding. Just as prior represcriptions have been deferred repeatedly in light of similar, though far less sweeping, regulatory changes, there is a corresponding need to defer this proceeding as well. Until the regulatory risks are minimized, it is premature to change the authorized rate of return.

C. LEC CAPITAL COSTS HAVE INCREASED

The LECs' capital costs have increased since the 1990 represcription, as shown by Dr. Avera's testimony in the USTA Comments. Accordingly, the current authorized rate of 11.25%

[7] Attached as Appendix B are pages 10-21, and pages 5-48 of Attachment A, of SBC's Petition of the SBC Companies for Forbearance, filed December 7, 1998, which demonstrate the fierce competition for the SBC Companies' dedicated transport service customers.

is too low in light of the LEC industry's capital structure, its cost of equity and its cost of debt. As Dr. Avera explains, the Commission should analyze incumbent LECs' capital structure based on market values, not book values as assumed in the Notice. The book value capital structure presented in the Notice is distorted by writeoffs, other accounting adjustments and the general effect of historical regulatory decisions. As such, the book value amounts are biased toward illustrating too much debt and too little equity.

LECs' market-value capital structures are likely to be about 80% or more equity, and 20% or less debt. Even assuming a decrease of 100 basis points in the cost of equity since the last prescription, 11.25% is a conservative estimate of the LECs' overall cost of capital. Indeed, because of the increased competitive and regulatory risks faced by LECs (as described in subsection B, above), the cost of equity may well have increased since the last prescription.

Policy concerns about consumer welfare, U.S. infrastructure development and the need to attract capital argue strongly for retaining the current authorized rate of return or increasing it. The Commission must consider such factors in this proceeding. An inadequate authorized rate of return would harm consumers by restricting the LECs' ability to fund investment in the newest technologies. If the authorized rate of return is inadequate, LECs will have insufficient capital to maintain their systems at the level demanded by their customers and regulators. These results are hardly in the public interest, nor are they consistent with the Communications Act's emphasis on advanced services and universal service.

II. NPRM COMMENTS

A. CHANGES TO THE LOW-END ADJUSTMENT MECHANISM FOR PRICE CAP LECS SHOULD NOT BE CONSIDERED IN THIS PROCEEDING.

The Notice seeks comment on whether the low-end formula adjustment for local exchange carriers subject to price caps regulation should be changed. The Notice tentatively concludes that the low-end formula adjustment should remain 100 basis points below the rate of return to be prescribed in this proceeding, and seeks comment on this conclusion. Parties are to

address the reasonableness of setting the low-end formula adjustment at 100 basis points below the unitary authorized rate of return that will be prescribed in this proceeding.

Just as it is the wrong time to change the authorized rate of return for rate of return LECs, it is an equally wrong time to change the low end adjustment mechanism for price cap LECs. The rapid onset of competition and the longer-term effects of the Commission's implementation of the 1996 Act are both examples of the changes taking place in the LEC industry which must be fully weighed before any change to the low end adjustment.

The Notice itself recognizes that:

> In 1986, the Commission adopted the RBOCs as a surrogate group of firms for the interstate access industry. In 1990, the Commission again concluded that, despite their diversification into nonregulated businesses, the RBOCs were still the most appropriate surrogates. Further, the Commission concluded that most competitive, nonregulated businesses are riskier than the regulated interstate access business and therefore, the RBOCs are riskier as a whole than their regulated telephone operations. As a result, the Commission determined that the cost-of-equity estimate for an RBOC as a whole may overstate the cost of equity for interstate access alone and considered this potential overstatement when determining the cost-of-equity estimates. In the *1995 Rate of Return Represcription Procedures Order*, the Commission found that the level of risks that RBOCs face was no longer similar to the risk confronting carriers subject to rate-of-return regulation and therefore the RBOCs' risk may not provide the best data upon which to base a uniform rate-of-return prescription. With the uncertainty following the passage of the 1996 Act, however, the RBOCs' cost of equity may no longer overstate that of rate of return carriers.

This passage acknowledges that the RBOCs have been historically (and as recently as 1995) recognized as more riskier enterprises than the rate-of-return ILECs, but that somehow the 1996 Act has leveled the amount of risk between the two types of companies. This tentative conclusion is, at best, questionable. While it is true that the 1996 Act has increased competitive risks for all of the ILECs, it contained protections for the smaller carriers (e.g. 47 U.S.C. Section 251 (f) (1),(2)) that are not generally available to the price cap LECs. Thus, it cannot be said that the 1996 Act made the long-recognized gap any smaller. Indeed, it appears that it may have widened. Since the risks may have increased for the price cap ILECs relative to the rate of return

ILECs, it would be wrong to move the low-end adjustment in lockstep with the authorized rate of return. Instead, each rate of return setting must be analyzed on its own.

In addition to the factors that must be considered in any change to the authorized rate of return for rate of return LECs, additional points must be considered whenever the low end adjustment mechanism is changed for price cap LECs. Specifically, there are reasons to phase out the low-end adjustment over time, and methods to accomplish this goal, that are currently being debated in the access reform proceeding.[8]

The public would be better served if the recommendations for access reform forwarded by SBC and USTA were heeded to eliminate the need for any low end mechanism. Only when these suggestions for reform to the entire price cap process are adopted, should the Commission even consider whether any overall changes to the level of the low-end mechanism are warranted. Given the ways in which SBC shows that the low end adjustment would be eliminated or reduced as services are removed from price cap regulation, it would be premature, at best, to lower the mechanism before these methods are fully explored.

B. THE ORIGINAL INTENT OF THE LEC PRICE CAP ORDER WOULD BE IGNORED IF THE LOW END ADJUSTMENT MECHANISM IS ALTERED AS PROPOSED.

In the original LEC Price Cap Order, the Commission took special care to set the low-end adjustment mechanism, only making slight reference to the 1990 Represcription Order[9] proceeding, which set the rate for LECs in general. Instead, the Commission appeared to have given special attention to the specific costs and risks facing the price cap LECs, and to the complex system of incentives and risks that the price cap plan created.[10]

Given that the original low-end adjustment was set so specifically, it must not be tied in lockstep to the overall authorized rate of return. Indeed, the LEC Price Cap Order took special

[8] See, Comments of SBC Communications Inc., filed October 26, 1998 in the pleading cycle to refresh the record in the Access Reform proceedings, pages 13-21.

[9] Represcribing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers, 5 FCC Rcd 7507 (1990) (1990 Represcription Order).

[10] Policy and Rules Concerning Rates for Dominant Carriers, 5 FCC Rcd 6786 (1990), paras. 127, 147-149, 164-165. (LEC Price Cap Order)

care not to include the small and mid-sized ILECs in the original price cap plan because "the foundations of productivity vary from company to company, and since the variation in terms of size, resource base, and geography among independents is so wide...."[11] Only by tying the two regulatory methods back together, and by linking the price cap system back to the vagaries and cost analyses of rate of return regulation, can the Notice's proposal be adopted. This linkage would be a reversal from the Commission's original intent to break the link between costs and rates due to the problems inherent in rate of return regulation.[12]

III. CONCLUSION

For the foregoing reasons, SBC respectfully requests that the Commission leave unchanged the authorized unitary rate of return for interstate services of local exchange carriers. Further, SBC respectfully requests that the Commission make no changes to the low-end adjustment formula for price cap LECs.

Respectfully submitted.

SBC COMMUNICATIONS INC
SOUTHWESTERN BELL TELEPHONE COMPANY
NEVADA BELL
PACIFIC BELL

By _____

Robert M. Lynch
Roger Toppins
Michael J. Zpevak
Thomas A Pajda
One Bell Plaza, Room 3003
Dallas, Texas 75202
214-464-5307

Their Attorneys

January 19, 1999

[11] LEC Price Cap Order at para. 116.
[12] LEC Price Cap Order at. para. 38-44.

Appendix A

of efficient competition by restricting the pricing flexibility that is available to ILECs. The Commission's rules must distinguish between the transport component and the switched access component of the interstate access market.

A. MANY OF THE COMMENTORS ATTEMPT TO MINIMIZE THE ACTIVE COMPETITION THAT ALREADY EXISTS.

Ad Hoc claims that SBC identifies a total of 1,017,883 "CLEC lines" across the seven-state SBC operating territory, but wrongly includes within this count 649,962 "CLEC lines" that were identified as "resold" SBC services.[3]

Ad Hoc's implication that resellers do not provide true competition is wrong. Just like the dozens of resellers of AT&T, MCI and Sprint long distance services, resellers of ILEC services are providing true competitive local service to end-users. For example, Birch Telecom provides resold services 'exclusively' and has installed a billboard in St. Louis stating "100% of our customers have fired Southwestern Bell", (see Appendix B). A true 'sign' that CLEC resold services replaces ILEC local service.

Once local service is provided to the end-user by the 'Competitive Local Exchange Company,' whether reselling or using its own facilities, that CLEC now brands that service as its own. The CLEC can offer a single bill, with both local and long distance provided by the CLEC, branded with its own name. The CLEC then has control over the customer for all future services or facility plans. If and when the CLECs builds their own facilities, they have the ability to migrate targeted customers to their new facilities, all of which is transparent to the end-user .

Reselling the ILECs local service is just one of several ways to enter the competitive local service market. Some CLECs may see resale as an interim method for providing service

[3]Ad Hoc Pg.4

until they can more fully develop their network infrastructure. However, many CLECs have found resale an effective method for long term customer growth.

CPI cites the Merrill Lynch estimates of the gross local market share gains (in revenues) of CLECs to be about 5.4% of the entire local market by year end 1998 and only about 7.7% by the end of 1999. In terms of access lines, CPI notes Merrill Lynch's estimates that CLECs (including the IXCs) will serve about 2.9% of the nation's access lines by year-end 1998. CPI argues that by the end of 1998, competitors to the ILECs will serve only about 1.4 million (0.8%) of the nation's estimated 177 million access lines through UNE-based entry.[4]

While Merrill Lynch estimates that by the end of 1998, competitors to the ILECs will serve only about 1.4 million (0.8%) of the nations estimated 177 million access lines through UNE-based entry, UNE-based entry is only a partial measure of CLECs facility-based presence. The number of UNE-based services does not take into account the number of customers that are served entirely over competitors own facilities. A better measure of a competitors facility-based presence is their number of E911 listings. These CLEC E911 listings include all of the CLEC's customers regardless of whether local service is provided through resale, UNEs or CLEC constructed facilities.

In SBC Company territory, UNE-based listings amount to only 12.5% of the count of competitor's facility-based E911 listings (60,294 UNEs divided by 480,544 Facilities-based E911 listings). Applying this assumption to Merrill Lynch's estimates (1.4M is only 12.5% of the total number of CLEC served lines), a more accurate number of CLEC-served lines is 11.2M or 6.3% of the nations estimated 177M access lines (according to Merrill Lynch) by the end of 1998.

Excel claims that competitive pressures cannot be relied upon to protect consumers and the public interest, citing figures released by the Commission.[5] The information Excel provides showing that CLECs served fewer than 160,000 access lines through UNE loops in the territories of nine large ILECs in 1997, however, is dated information and should be updated, if possible, to reflect a more current status. Excel also stated that "Furthermore, information gathered by the Commission shows that as of December 31, 1997, no competitor was utilizing unbundled loops in 16 states and competitors were using fewer than 100 unbundled loops in 12 states."

Nevertheless, the same report referenced by Excel (*Trends in Telephone Service*, FCC Common Carrier Bureau) shows 22 states with 100 or more unbundled loops (16 states with >100 < 10,000 loops; 6 states with > 10,000 loops). SBC provided over 19,000 loops to competitors as of December 1997. Although SBC's numbers do not reflect those of other ILECs, they do show a much more significant count than Excel references. To date, SBC has provided in excess of 59,000 loops to competitors.

RCN claims that less than 0.02% of buildings are connected to CLEC networks.[6] RCN wrongly uses this figure to argue the lack of competition.

CLEC facilities do not have to connect to every single building like the ILEC's. CLECs connect to the most lucrative buildings, in effect, cream-skimming. CLECs build-out when and to where it is economically feasible, not to where they are required to for regulatory reasons. In Dallas, TCG (now owned by AT&T) built facilities to the main downtown business district first, then along the IH 35E Stemmons corridor, then to the high-tech business district in Richardson, TX and then to the far north Plano, TX business center, Legacy Park, where several telecom-

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[4]CPI p. 7-8.
[5]Excel p. 7.

intensive commercial accounts have their headquarters. This is one example to show that facilities-based CLECs build only where and when it is economically advantageous to do so.

Other relevant evidence of competition (a listing of SBC Company competitors, together with an estimate of their existing facilities, is included in Appendix B attached hereto. A report on the SBC Company successes in opening local markets is attached hereto as Appendix C.

B. MCI UNREASONABLY MINIMIZES ITSELF AS A COMPETITOR.

MCI asserts that it does have the opportunity to avoid the ILEC access networks completely by building its own local facilities, but complains that the costs involved in building facilities are staggering.[7]

MCI admits, however, that it has the opportunity to avoid the ILEC access networks completely by building their own local facilities and also admits that they are doing so as quickly as possible. A few facts from MCI's own web page clarifies this[8]:

> MCI claims it is the leading competitive local exchange carrier (CLEC) in the U.S.
>
> MCI claims to serve millions of U.S. business and residential customers over a 45,000-mile, all-fiber high capacity nationwide network, enough fiber to stretch from San Francisco to Washington, D.C. 16 times.
>
> MCI claims its local service portfolio comprises 9,000 route miles of an advanced fiber-optic network, serving more than 100 cities nationwide.
>
> MCI claims its local networks are connected to more than 30,000 buildings, more than any other competitive local exchange carrier, including the Sears Tower in Chicago and the World Trade Center in New York.
>
> MCI claims it provides advanced data and Internet services. The company's Internet business is allegedly growing at a rate of more than 70 percent and generates more than $2 billion in revenue on an annualized basis. In addition, MCI claims to be the leading

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[6]RCN p. 2
[7]MCI p. 21
[8]http://www.wcom.com/about_worldcom/corporate_overview/US_fact_sheet/

ATM service provider in the U.S. and to be among the top three providers of frame relay services in the industry.

MCI claims its wholesale services unit provides service to more than 750 carriers and resellers worldwide.

Further, MCI claims it will require an investment of $21 billion to extend its local network facilities to 18% of the businesses in the U.S. However, with no obligation to deploy facilities to every business and residence, regardless of how remotely located, demanding access to long distance service, MCI can target its investment to effectively compete for the most profitable exchange access market segments. Clearly, deploying network facilities the length of Wall Street will have a far different competitive effect than investing the same amount of capital to ensure access to long distance networks for ranches in rural southwestern areas (probably among the 82% of businesses MCI's investment strategy does not consider). Regardless of the amount of investment capital committed to network facility deployment, MCI's ability to selectively target its construction programs to maximize profits should not be construed as a competitive disadvantage.

Thus, MCI should not be heard to complain of the costs of building facilities.

C. THE EIGHTH CIRCUIT'S DECISION ON THE BUNDLING OF UNEs IS IRRELEVANT TO THE ISSUES HERE.

Many parties claim that the Eighth Circuit's decision to vacate 47 C.F.R. Section 51.315(b) (the rule that required LECs to provide combinations of network elements) has rendered network elements unusable as a practical matter.[9] Nevertheless, despite the Eighth Circuit's ruling, several states (most notably Texas) still require the SBC Companies to recombine UNEs at minimal or no charge to CLECs. Since many commentors are still not

[9]AT&T p. 4, Ad Hoc p.6, CTSI pp. 2-3, Comptel p. 10, KMC pp. 2-3, RCN p. 3.

APPENDIX C

SBC'S SUCCESS IN OPENING ITS LOCAL MARKETS AND COMPLYING WITH THE 1996 TELECOMMUNICATIONS ACT

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SBC'S SUCCESS IN OPENING ITS LOCAL MARKETS AND COMPLYING WITH THE 1996 TELECOMMUNICATIONS ACT

October 1998 Report -- Overview

SBC's local exchange companies (Southwestern Bell Telephone, Pacific Bell and Nevada Bell) (referred to collectively here as SBC) have dedicated significant resources and investment to open their markets to local competition and to comply with all requirements contained in the 1996 Telecommunications Act. SBC is committed from the highest levels of the companies to open their local networks to enable others to enter the local exchange telecommunications markets in which SBC operates. As described in detail below, SBC has made available products, services and systems required by Section 251 and the competitive checklist of the 1996 Act, and competitive local exchange carriers ("CLECs") or local wholesale customers have ordered and are actually using each of the 14 competitive checklist services and products to provide local service in all seven SBC states.

There is irrefutable evidence that new entrants are obtaining the network elements that they need from SBC to provide local service, that they are providing such exchange services to end users and that their ability to enter the market is unambiguous. SBC has lost more access lines to its local wholesale customers than any other LEC in the country and in May, 1998 became the first RBOC to lose more than one million lines to CLECs. Taken together, these data demonstrate that barriers to entry into the local market in SBC's states have been eliminated, that competitive entry is occurring and that all 14 checklist items are legally and practically available to CLECs that want them. CLECs have obtained a **minimum of 1.2 million to 1.86 million resold and facilities-based lines in SBC's states**. As described below, the 1.2 million lost lines figure is a minimum and clearly understated number and the 1.86 million figure is a realistic estimate based on very conservative assumptions. Of the approximately **1.86 million** lines obtained by CLECs, approximately **686,000** were resale lines and an estimated **1.2 million** lines were captured by facilities-based carriers. These lost lines, moreover, represent a disproportionate revenue loss since the major long distance carriers and CLECs have publicly acknowledged that they have targeted the more profitable "high value" heavy users. As a result of SBC's compliance efforts, CLECs now can use resale, interconnection or unbundled network elements to compete for and take SBC customers.

In the face of undeniable market facts, it is clear that SBC has opened its markets to local competition and made available the statutorily required 14 point checklist items. The numbers are clear and irrefutable. For example in the past 2½ years, not only has SBC lost almost two million lines to CLECs, but through the end of September, 1998:

- SBC has also signed 390 interconnection agreements with local wholesale customers and 286 of these agreements have been approved by state PUCs
- 264 CLECs are operational and have passed local orders to SBC
- More than 124 CLECs are using SBC's Directory Assistance and Call Completion Services
- More than 3.1 million CLEC service orders have been processed without a backlog
- 557,400 CLEC customers are listed in SBC's White Pages

- More than 438,400 trunks have been provisioned to CLECs (with a call carrying capacity of 4.3 million lines and it is estimated that each of these trunks supports at least 2.75 CLEC lines)
- 124,000 lines have been converted to CLECs via interim number portability and LNP
- 59,600 unbundled loops have been provisioned
- 846 operational physical collocation cages have been provided to CLECs
- 26.6 million telephone numbers have been provided to CLECs for facilities-based use
- More than 17.2 billion minutes of local and Internet traffic have been exchanged between SBC and CLEC networks

Moreover, SBC has developed and implemented more than 65 performance measurements in each of its seven states covering all aspects of its relationships with CLECs. These measurements mirror precisely the model performance measurements advocated by the U.S. Department of Justice. The results generated from these measurements demonstrate that SBC is providing CLECs with checklist items in substantially the same time and manner that it providing such services to itself. Thus, the IXCs' and CLECs' argument that SBC has not lost the required number of local customers is an intentional mischaracterization of the Act, as conceded by the DOJ and the FCC. Both of these agencies acknowledge that there is no market share loss or metric test required by the Act. The only statutorily required test is embodied in the competitive checklist and irrefutable market facts confirm that SBC has made available the checklist items.

The fact that CLECs have obtained almost two million lines from SBC is compelling evidence that SBC has opened its markets to competition. In light of the market facts, listed above, it is clear that many of the isolated, anecdotal, outdated and unrepresentative complaints raised by the major long distance carriers are self-serving and have less to do with whether SBC has actually made available specific checklist items in an appropriate manner and more to do with protecting their long distance market shares and profits from the increased competition that would result from SBC entering that market. Moreover, isolated and anecdotal complaints raised by other CLECs must also be put in context since it is in their self-interest to delay SBC's entry into the long distance market for as long as possible so that they can continue to use the 271 process as leverage to obtain additional advantages from regulators and to target and offer one-stop shopping to high profit business customers while SBC is denied the ability to offer comparable full-service bundles of services to business and residential customers. Notwithstanding the extraordinary efforts it has made to date to open its markets, SBC is continuing to make improvements in its procedures and systems, it is actively participating in collaborative processes in Texas and California, and it is working with regulators and wholesale customers to resolve identified issues.

SBC's Capital and Expense Investments To Open Its Markets

- Since the passage of the 1996 Act on February 6, 1996, SBC has devoted significant financial, technical and personnel resources to implement the market- and network-opening requirements of Sections 251 and 252 of the Act. SBC management and employees have made extraordinary efforts to open SBC's networks to competitors. SBC has incurred more than $1.2 billion in expense and capital expenditures and devoted more than 3,300 employees

to implement the Act and open its local markets to competition – including but not limited to operational support systems, number portability, trunking, local service centers, equipment, computer hardware, software and manpower. Of these expenditures, Pacific Bell and Nevada Bell have spent more than $702 million and SWBT has expended more than $493 million. By the end of 1998, SBC estimates that it will have spent a total of $1.3 billion making certain it meets the requirements of the Act.

Interconnection Agreements

- **Signed Agreements:**
  SBC and CLECs have signed 390 interconnection and resale agreements within SBC's seven-state service area. In addition, 535 CLECs have received PUC approved certificates to provide local service in SBC states. The good faith associated with SBC's negotiation of interconnection agreements with CLECs is illustrated by the fact that the parties voluntarily consummated 390 agreements and only 26 arbitrations were required. In excess of 90 percent of the agreements approved by PUCs have never been appealed, they are in force, and CLECs have access to all of their terms and conditions.

- **PUC Approved Agreements:**
  The various state commissions have approved 286 SBC-CLEC interconnection and resale agreements. These approved agreements give the CLECs everything they say they need to provide local services and compete against SBC. There are a large number of PUC approved agreements in each of SBC's states: Texas: 126; California: 31; Kansas: 35; Arkansas: 29; Oklahoma: 22; Missouri: 30 and Nevada: 13 approved agreements.

- **Current Negotiations:**
  SBC currently is in the process of negotiating more than 537 additional interconnection, resale and combination interconnection agreements.

CLECs Competing Against SBC

- As of the end of September 1998, **264** CLECs were operational in SBC's territory and passing resale, interconnection or UNE orders to SBC. 122 CLECs were passing orders in Texas alone.

SBC Access Lines Lost to CLECs Based on E-911 Listings and Resale

- Through the end of September 1998, **1.2 million** access lines have been captured by CLECs through resale or through the establishment of new facilities-based service (based on E-911by CLECs in SBC's seven-state service area). Approximately 714,000 SBC lines have been resold by CLECs and approximately 480,500 additional customers are being served on a facilities-basis (as indicated by CLEC E-911 listings) by CLECs in SBC's territory. As described below this is a conservative and minimum number of lines served by CLECs.

SUMMARY TABLE OF LINES LOST—CONSERVATIVE ESTIMATE

A conservative and understated estimate of the approximate number of lines lost to CLECs in SBC's 7 states on a resale and facilities-basis (using E-911 listings as the indicator) is:

		Resale Total	Resale Residential	Resale Business	Resale Priv. Coin	Facilities Based Lines	Total Lines Lost
a)	California:	251,600	121,900	120,230	9,470	345,070	596,670
b)	Texas:	317,128	197,066	106,114	13,948	80,173	397,301
c)	Kansas:	61,847	26,736	35,101	10	2,416	64,263
d)	Oklahoma:	34,555	25,322	8,341	792	20,038	54,593
e)	Missouri:	29,741	16,027	13,663	51	5,633	35,374
f)	Arkansas	16,892	14,464	2,418	10	12,422	29,314
g)	Nevada:	2,115	327	1,788	0	14,792	16,907
RESOLD LINES:		**713,778**	401,842	287,655	24,281		
FACIL.-BASED LINES LOST:						**480,544**	
SBC TOTAL LINES LOST:							**1,194,322**

REALISTIC ESTIMATE OF TOTAL COMPETITIVE LINES SERVED BY CLECS

It is also possible to estimate how many lines are being served by facilities-based carriers by calculating the "estimated bypass" associated with the interconnection trunks that have been provided to CLECs. Facilities-based CLECs do not order trunks unless they have local lines and traffic to support and utilize such trunks. Based on past engineering experience, most LECs would estimate that every trunk could support approximately ten facilities-based lines. Since CLEC networks may not be engineered for maximum efficiency and since CLECs are disproportionately serving heavy use Internet lines, we have made the very conservative assumption that CLEC trunks are serving only 2.75 facilities-based lines per end-office interconnection trunk. Using, this conservative methodology demonstrates that **CLECs are serving approximately 1.86 million lines in SBC's states (i.e., 713,778 resold lines and an estimated 1,146,099 facilities-based lines).** The following chart illustrates the number of resold and bypass facilities-based lines that are being served by CLECs in SBC's seven states:

	Resold Lines	Unbundled Loops	Total Lines Provided By SBC	Interconnection Trunks	Estimated Bypass Lines[1]	Total Competitive Lines served by CLECs
California	251,600	47,275	298,875	273,813	705,710	957,310
Texas	317,128	2,651	319,779	121,691	331,999	649,127
Missouri	29,741	1,770	31,511	17,918	47,504	77,245
Kansas	61,847	402	62,249	4,153	11,018	72,865
Oklahoma	34,555	1,701	36,256	11,514	29,962	64,517
Arkansas	16,892	1,853	18,745	6,434	15,840	32,732
Nevada	2,115	3,986	6,101	2,928	4,066	6,181
TOTAL	**713,778**	59,638	773,416	438,451	**1,146,099**	**1,859,877**

SBC has made Resale available

- Given that CLECs now resell more than **713,700** lines in SBC's territory, there can be no dispute that resale of local service is available and significant in SBC's territory. SBC has demonstrated that it has made resale available and that its OSS can process CLEC resale orders in an accurate and timely manner without any backlogs. For example, in the last four months of 1997 (before AT&T and MCI unilaterally decided to abandon residential resale competition), SBC processed an average of 60,000 resale orders in each of these four months without a backlog. These numbers confirm that SBC has developed state-of-the art operational OSS that can handle large volumes of CLEC resale orders in an accurate, timely and non-discriminatory manner.

- Resale activity has changed and slowed since April 1999 as AT&T and MCI continued there efforts to redline the residential resale market. First, beginning in April, there was a noticeable shift by CLECs from residential to business customers. Prior to April, CLECs had used resale to serve more residential than business customers. After April, CLECs shifted their efforts to use resale to serve business customers, almost to the exclusion of residential customers. For example, prior to April, 66 percent of the 615,000 resale lines in SBC's states served residential customers and 34 percent served business customers. Between April and September, the trend reversed and CLECs used resale to serve business customers almost

[1] Bypass estimate assumes 2.75 lines per interconnection trunk minus the number of Unbundled Loops. This number represents the estimated number of bypass lines served by facilities-based carriers in SBC's seven states.

exclusively (e.g., during that period, CLECs obtained 100,000 business resale lines compared to only 10,000 net residential lines). Second, between March and September, CLECs have almost completely abandoned the residential resale market in California. Prior to March, CLECs served more than 145,000 resale lines in California, but from March to September, cumulative residential resale lines in California declined by more than 25,500 lines as a result of publicly acknowledged decisions by AT&T and MCI to stop signing up new residential resale customers in California and by encouraging their existing resale customers to switch to other carriers. Nevertheless, even if the major IXCs chose for their own strategic, internal business and regulatory reasons not to take advantage of the residential resale option made available to them by SBC because they do not like the resale pricing discounts required by the 1996 Act and approved by the PUCs, there can be no dispute that SBC has met its obligations under the Act to make resale available to its local wholesale customers. The figures listed above demonstrate that SBC has made available to CLECs all the systems and services they need to compete on a resale basis in each of SBC's states. In all of SBC's, states, competitors can sign-up any or all resale customers in those states for their local service as easily as they sign-up long distance customers.

FACILITIES-BASED COMPETITION STATUS:

Facilities-based competition in SBC's states is substantial and has increased dramatically in recent months. CLECs are serving a minimum of **480,500 to 1.2 million lines on a facilities-basis** in SBC's territory. The following market facts demonstrate that SBC has opened its local markets to competition and that in addition to making resale available to competitors, SBC is also providing CLECs with the facilities and network elements they need from SBC in order to compete on a facilities-basis in the local exchange market. Information is not available to SBC to identify with precision the full extent of facilities-based competition in each of its states. Available indicators underestimate the extent of facilities-based competition and are imperfect measures of competitive entry because each captures only that part of entry that requires action by SBC and does not capture the extent of facilities-based self-supply being undertaken by CLECs. Nevertheless, a review of available indicators (e.g. CLEC E-911 listings and lines served by Interconnection Trunks) demonstrate that there is significant and growing facilities-based competition in SBC's states and that a minimum of **480,500** lines are being served by facilities-based carriers and that a more realistic estimate is that an estimated **1.2 million** lines are being served on a facilities-basis by CLECs in SBC's states.

CLEC E-911 Numbers—Best Conservative Indicator of Facilities-Based Competition

- CLEC listings in the E-911 database is the best conservative available indicator of the minimum number of access lines being served on a facilities basis by facilities-based carriers. These numbers, however, underestimate the actual number of facilities-based lines being provided by CLECs because many businesses only use a single number or a few numbers to serve a large group of access lines. Nevertheless, the E-911 listings show that CLECs serve a minimum of **713,778** lines in SBC's 7 states on a facilities-basis. Specifically, CLECs have requested E-911 service for 713,778 lines from their own NXX Codes that were assigned to them to provide facilities-based service.

- In California alone, 14 facilities-based carriers serve approximately 345,000 lines on a facilities basis (based on E-911 listings). CLEC E-911 listings indicate that there is at least

the following number of lines being served on a facilities-basis in the other SBC states: Texas: 80,000; Oklahoma: 20,000; Nevada: 14,800; Arkansas: 12,400; Missouri: 5,600; and Kansas: 2,400 facilities-based lines.

- See above for a description of the 1.86 million facilities-based lost lines estimate based on interconnection trunks being used by CLECs.

Numbers Ported—Another Indicator of Facilities-Based Competition

- More than **124,000** existing SBC lines have been ported via interim number portability (108,269 lines) and long-term number portability (15,768 lines) to facilities-based competitors in each of SBC's seven states. CLECs have chosen to port mostly business lines, but the same basic processes and procedures can be used to port residential lines. This is one indicator of facilities-based competition that has occurred in SBC's seven states, but it underestimates the actual amount of facilities-based competition that has occurred. Each of the numbers ported represents conversion of an existing line from SBC to a facilities-based CLEC provider. It should be noted, however, that lines do not have to be ported when CLECs serve new lines/customers on a facilities-traffic.

Minutes Exchanged – Another Indicator That SBC's Networks Are Open

- The fact that more than **17.2 billion** minutes of local and internet traffic has been exchanged between SBC and CLEC networks is compelling evidence that SBC has opened its networks and has met the competitive checklist. Reciprocal compensation minutes of use is an indicator that demonstrates that actual local traffic is being exchanged between CLECs and SBC. A substantial amount of local traffic has been exchanged between SBC and CLECs, with most of that traffic (and the corresponding reciprocal compensation) going from SBC to the CLECs. For example, approximately **5.3 billion** minutes of local traffic (excluding Internet traffic) has been exchanged between SWBT/Pacific Bell/Nevada Bell and CLECs over interconnection trunks. More than 80% of this local traffic has been exchanged from SBC to CLEC networks. It should be noted, that these minutes do not capture all local minutes being generated by CLECs because they do not include CLEC-to-CLEC traffic or on-net (i.e., intra-CLEC) traffic.

- In addition, the fact that an additional **11.9 billion** minutes of Internet traffic has been exchanged between SBC and CLEC networks also demonstrates that SBC's networks have been opened to competition. The **17.2 billion** minutes of local and Internet minutes-of-use exchanged between SBC and CLEC Networks confirm that SBC's networks are open to and connect with CLEC networks.

UNEs, Interconnection and Other Facilities-Based Products Provided By SBC to CLECs

- **Interconnection Trunks:**

  SBC's provisioning of local interconnection trunks is an indicator that the interconnection checklist requirement has been met and that actual local exchange traffic is being exchanged between CLECs and SBC. SBC has provisioned approximately **438,400** one-and two-way interconnection trunks to CLECs in SBC's seven-state service area. This represents the call

carrying capacity on the local service provider networks for 4.3 million lines. Moreover, as described above, facilities-based carriers do not order trunks from SBC unless they have local lines and traffic to utilize such trunks. It can be conservatively estimated that each trunk being used by a CLEC is supporting at least 2.75 facilities-based lines being provided by that CLEC. These trunks allow CLECs to connect their networks and customers to SBC's network. The following number of trunks were provided by SBC to CLECs: California: 273,800 trunks; Texas: 121,600; Oklahoma: 11,500; Missouri: 17,900; Arkansas: 6,400; Kansas: 4,100; and Nevada: 2,900 trunks.

- **Unbundled Loops:**

  Unbundled loops are the direct connection between the local network and customer's premises. CLECs can provision loops themselves, or they can lease unbundled loops from SBC or other suppliers. Because CLECs can self-provision loops, the number of unbundled loops provided by SBC understates the extent of existing facilities-based competition. Nevertheless, approximately ~~59,600~~**51,800** unbundled loops have been provisioned by SBC to CLECs in SBC's seven states.

- **CLEC Collocation Arrangements:**

  Collocation is an important measure of competitive facilities-based presence because once a competitor is collocated in an SBC central office it has access to every loop connected to that central office. ~~846~~ **787** physical collocation arrangements are operational in SBC's seven-state service area -- ~~262~~ 203 of these are in SWBT's region, with 581 in California.

- 386 physical collocation arrangements (96 in SWBT and 289 in California/Nevada) are currently being worked on and pending completion.

- 121 virtual collocation arrangements are operational in SWBT's five-state territory.

- **E-911 Trunks:**

  CLECs have requested and SBC has provisioned **908** operational E-911 trunks to facilities-based CLECs in SBC's seven-state service area. Of this number, 632 are located in California and 270 are in SWBT states.

- **DA/OS Trunks:**

  More than **1,270** Directory/Operator Assistance trunks have been provisioned by SWBT to CLECs in the five SWBT states. More than 120 CLECs are using SWBT's Directory Assistance and "O" Call Completion services.

Telephone Numbers Requested By and Assigned to CLECs

- 2,661 NXX codes (each code representing 10,000 numbers) have been assigned to facilities-based CLECs in SBC's seven-state service area, with an additional 278 assignments pending. In other words, CLECs have requested and SBC has assigned **26.6 million** telephone numbers to CLECs in its seven states; more than 14.9 million numbers have been requested by CLECs in California and an additional 11.6 million numbers have been requested in SWBT's five states.

Access to SBC White Page Directories

- CLEC information can be included in all SBC White Page directories in SBC's seven state service areas. SBC has provided more than **557,000** white page listings for its local wholesale customers. Of these listings, 375,000 have been in SWBT states and 180,800 in California.

Access to SBC Poles and Conduits

- SBC has provided competitors with access to more than **374,000** of its poles and approximately **8.4 million feet** of conduit space for their use to compete against SBC in its seven states.

CLEC Orders Handled by SBC's OSS and Local Service Centers

- Since the 1996 Act passed, SBC's OSS and Local Service Center personnel have handled more than **3.1 million** service orders from CLECs to order facilities, network elements and resold or second lines for their customers, change or add vertical services etc. More than 2.1 million orders from CLECs have been processed in the SWBT five-state region and approximately 925,000 orders have been processed in California/Nevada. The fact that SWBT processed more than 1.2 million orders in 1997, and an additional 1.4 million orders in the first nine months of 1998, without a backlog, is strong evidence that SBC has developed state-of-the-art OSS and that these systems are being used by CLECs to compete in the local market against SWBT. Orders are also being processed in California in a similar timely and accurate manner without any backlogs.

- SBC also demonstrated in Texas that its OSS (which is the same system used in all five SWBT states) could handle large increases in volumes from CLECs. Over **1.6 million** CLEC service orders in Texas have been processed, with over 1 million orders processed in January through September of 1998. SBC's OSS and Local Service Centers have handled the increased volume of service orders without experiencing a backlog.

Performance Measurements

- SBC has also developed and implemented more than 65 performance measurements that cover all aspects of its relationships with CLECs in all seven SBC states. These measurements mirror and fully comply with the model set of measurements advocated by the U.S. Department of Justice. SBC's performance measurements cover each of the five recognized OSS functions (i.e., preordering, ordering, provisioning, maintenance and repair, and billing).

- The results generated by these performance measurements compare SBC and CLEC performance for each of the measurements and these results confirm that SBC is providing each of the 14 competitive checklist items in substantially the same time and manner that is it providing such services to itself.

Conclusion

- The resale, interconnection, facilities-based and OSS-related numbers listed above provide compelling evidence that SBC has opened each of its seven states to resale and facilities-based competition and that SBC provides its local wholesale customers with the systems and services they need to compete and capture SBC's local customers.

- The record confirms that CLECs have captured **almost 2 million** resold and facilities-based lines in SBC's states, that CLECs have obtained millions of checklist products from SBC, that SBC has provided CLECs with practical and real access to all 14 competitive checklist items and that SBC has opened its local markets to competition.

- IXCs and CLECs who have made a strategic decision not to invest or compete in SBC's local markets on a broad-scale or facilities basis, particularly the residential market, are doing so for their own economic, regulatory and business reasons, not because they are unable to obtain competitive checklist products and services from SBC. CLECs who do want to compete on either a resale or facilities-basis in SBC's territory for business or residential customers can provide and are, in fact, already providing such local services in direct competition with SBC.

10/28/98 Report Date
Data through 9/98 unless otherwise noted

Appendix B

example, inhibits the carrier from quickly introducing new services and from quickly responding to new offerings by its rivals, thereby reducing its incentive to initiate price reductions and other pro-competitive strategies. Furthermore, competitors can use the regulatory process to delay and thwart such strategies. Regulation imposes compliance costs on the carrier and administrative costs on the Commission.[31] For the same reasons, the Commission should forbear from regulating the SBC Companies as dominant in the market for high capacity dedicated transport services in the specified MSAs.

III. THE SBC COMPANIES DO NOT HAVE MARKET POWER IN THE MARKET FOR HIGH CAPACITY DEDICATED TRANSPORT SERVICES IN THE SPECIFIED MSAs

Attachment A to this petition is the report of a study conducted in the second quarter of 1998 by Quality Strategies, a market research firm. The study provides a high-level overview of the high capacity dedicated transport market and analyzes the state of competition for high capacity telecommunications services. Quality Strategies defines the high capacity dedicated transport market as the universe of DS1 and above circuits used either for end user customer traffic (e.g., circuits to provide either point-to-point or special access services) or for carrier transport (e.g., circuits to provide links between points-of-presence, central offices, and tandem switches). The high capacity dedicated transport market includes only facilities-based providers

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F.C.C.2d 554, 579-80 [¶¶ 37-38] (1983), vacated on different grounds, AT&T v. FCC, 978 F.2d 727 (D.C. Cir. 1992), cert. denied, 509 U.S. 913 (1993).

[31] AT&T Non-Dominant Order, 11 FCC Rcd at 3288 [¶ 27].

of high capacity dedicated transport circuits. It does not include resellers or carriers that provide their own transport.[32]

The demand for high capacity dedicated transport services is concentrated primarily in urban areas.[33] With competitive conditions sufficient to preclude suppliers from exercising market power in pricing these services in the largest metropolitan statistical areas in the SBC Companies' service territory, regulatory forbearance is warranted for these specific geographic areas. The SBC Companies lack market power in these areas because they lack the ability to raise and maintain prices above competitive levels without driving away so many customers as to make such an increase unprofitable.[34] This is because (1) the number and nature of competing suppliers in this market is large enough and strong enough to respond effectively to any price increase; (2) the SBC Companies' market shares have fallen significantly; (3) the price elasticity of demand for the SBC Companies' high capacity dedicated transport services means that customers are readily willing to change suppliers; (4) the supply elasticity of the overall market means that the SBC Companies' competitors stand ready and able to provide high capacity dedicated transport services should the SBC Companies' prices rise above competitive levels;

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[32] See Attachment A at 2-4.

[33] For example, about 97.7% of the SBC Companies' high capacity dedicated transport circuits are located in the 72 MSAs in SBC's region; 70% of the SBC Companies' high capacity dedicated transport circuits are located in the 14 MSAs for which relief from dominant carrier regulation is sought in this petition. See Attachment B.

[34] This is the definition of market power offered by Landes and Posner. See AT&T Non-Dominant Order, 11 FCC Rcd at 3275-76 [¶ 7].

and (5) when compared to their competitors, the SBC Companies gain no unfair competitive advantage from their cost structure, size, or resources.[35]

A. Market Participants

The competitive rivalry that currently exists in the SBC Companies' high capacity dedicated transport markets makes it impossible for the SBC Companies, or any other supplier, to wield market power. With at least one competitor in each of the 14 largest MSAs in the service territory of the SBC Companies and 10 different telecommunications suppliers owning and operating competitive networks in these cities, competitive entry has occurred in the high capacity dedicated transport markets, and significant costs have already been sunk to satisfy market demand.[36]

MCI WorldCom, through various mergers and acquisitions, is now a facilities-based provider of high capacity dedicated transport services in 13 of the 14 MSAs identified for regulatory relief in this petition.[37] AT&T (through its recent acquisition of TCG) now operates high capacity dedicated network facilities in seven of the MSAs.[38] Both MCI WorldCom and

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[35] See id. at 3274 [¶ 5], 3293 [¶ 38].

[36] See generally Attachment A. Customers for high capacity dedicated transport service in 9 of the 14 MSAs at issue in this petition have at least three suppliers other than one of the SBC Companies from which to choose.

[37] MCI WorldCom now owns the facilities once owned separately by Brooks Fiber, MFS, MCI, Wiltel, and WorldCom. Of the 14 MSAs at issue in this petition, the only one in which MCI WorldCom does not have facilities is El Paso, Texas. See Attachment A at 35-36.

[38] AT&T now owns facilities in Los Angeles, San Diego, San Francisco, San Jose, St. Louis, Dallas-Ft. Worth, and Houston. See Attachment A. The Quality Strategies study was conducted prior to the closing of AT&T's purchase of TCG; while the study makes reference only to TCG's facilities, this petition identifies these facilities as now belonging to AT&T.

AT&T not only have access to substantial amounts of investment capital further to expand and enhance their local networks, but they have strong incentives to compete with the SBC Companies for market share, particularly where MCI WorldCom and AT&T already have local networks in place. With substantial investments in local network facilities, MCI WorldCom and AT&T will likely seek to maximize efficiency gains from vertical integration. They can minimize their costs by providing high capacity dedicated transport services to their own local exchange networks.

The presence of numerous competitors' networks throughout the SBC Companies' largest high capacity dedicated transport market areas means that any attempt by the SBC Companies to increase the prices of their dedicated transport services will drive customers into the hands of their competitors. This is especially true now that MCI WorldCom and AT&T are present in virtually every market.

B. Market Share

The Commission has consistently recognized that "market share alone is not necessarily a reliable measure of competition, particularly in markets with high supply and demand elasticities."[39] The Commission has concluded that AT&T lacked market power despite its

[39] Competition in the Interstate Interexchange Marketplace, Report and Order, 6 FCC Rcd 5880, 5890 [¶ 51] (1991) ("Interexchange Competition Order"); see also AT&T Non-Dominant Order, 11 FCC Rcd at 3307 [¶ 68] ("It is well-established that market share, by itself, is not the sole determining factor of whether a firm possesses market power."). In assessing the significance of market share data as an indicator of competition in telecommunications markets, the Commission has determined that market shares in the range of about 50% to 55% are "not incompatible with a highly competitive market" in the presence of relatively high supply and demand elasticities. Interexchange Competition Order, 6 FCC Rcd at 5889-90 [¶¶ 50-51].

finding that AT&T's market share in the relevant market was approximately 60%.[40] The Commission has also recognized that a declining market share may support the conclusion that a firm lacks market power.[41]

The Quality Strategies study attached to this petition has calculated market shares as of the second quarter 1998 by measuring a company's share of the total number of dedicated DS1 and above circuits that are provided over carrier-owned network facilities (i.e., excluding resale).[42] As a measure of the relative intensity of facilities-based competition, the SBC Companies' facilities-based competitors have captured more than half of the overall high capacity dedicated transport markets in both the San Francisco and Dallas-Ft. Worth MSAs and only slightly less than 50% of the Houston MSA market.[43] Competitors have captured about 45% of the high capacity dedicated transport markets in the Los Angeles, San Diego, and Austin markets.[44] The SBC Companies' facilities-based competitors are also supplying 30% to 40% of

[40] AT&T Non-Dominant Order, 11 FCC Rcd at 3307 [¶ 68].

[41] Id. [¶ 67].

[42] Basing market shares on units of physical output, such as percentages of DS1 equivalent circuits, avoids the misinterpretations associated with relying on revenue data to measure market shares. Fluctuations in revenues can reflect individual carrier marketing decisions, decreasing the reliability of market share information as an indicator of market power. For example, special promotions and substantial, but temporary, price discounts are consistent with attempts to "buy market share" sometimes observed in competitive markets. Such marketing strategies can artificially (albeit temporarily) inflate rival firms' relative shares of total market revenues. See Comments of Southwestern Bell Telephone Company, Pacific Bell, and Nevada Bell at 13-16, CC Docket Nos. 96-262, 94-1 (filed Nov. 9, 1998) (discussing this point in detail).

[43] See Attachment A at 18-20, 32-34, 37-39.

[44] Id. at 9-12, 15-17, 29-31.

the high capacity dedicated transport circuits in the Little Rock, Sacramento, San Jose, Oklahoma City, and San Antonio markets.[45] Nearly 30% of the total high capacity dedicated transport in the St. Louis and El Paso markets is supplied by e.spire, AT&T, MCI WorldCom, and Intermedia Communications ("ICI").[46]

With competitive losses exceeding 25% in each of the 14 MSAs at issue here, the SBC Companies could not successfully increase their prices for high capacity dedicated transport service substantially above competitive levels and reap "monopoly profits." The Commission should forbear from regulating the SBC Companies as dominant carriers in these 14 MSAs, for the substantial competitive presence in each of these markets will ensure that prices remain at competitive levels.

C. Demand Elasticity

The price elasticity of demand for a particular carrier's services measures the responsiveness of customers to changes in the carrier's prices relative to the prices of substitute services. If demand is elastic, a carrier will quickly rescind any supracompetitive price increase to halt continuous revenue losses as demand shifts toward its rivals' lower-priced services. Relatively elastic demand for a carrier's services is therefore inconsistent with market power.

Since high capacity dedicated transport services are sold predominantly to telecommunications carriers and large corporate end users, total market demand for these

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[45] Id. at 6-8, 13-14, 21-22, 27-28, 40-43.

[46] Id. at 23-25, 35-36.

services is determined primarily by these two customer groups.[47] In addition, with the advent of personal computing, Local Area Network and Wide Area Network technology has spurred demand for high capacity networks that utilize DS1 and DS3 networks that tie "multi-location" business, city, and state municipalities, educational institutions, and some medium size retail businesses together. In its assessment of competition in the interstate, interexchange long distance market, the Commission concluded that large business customers "are to a large degree demand-elastic and will switch carriers in order to obtain price savings and desired features."[48] The Commission recognizes that large businesses are well-informed, sophisticated customers, routinely relying on the expertise of telecommunications managers and consultants in choosing among various carriers' services and prices.[49] There is no reason to expect large corporate end users to be any less informed or sophisticated in choosing among various carriers' high capacity dedicated transport services than they are in selecting retail long distance services.

Recognizing that large businesses typically prefer to divide their long distance traffic among several different carriers, the Commission has noted that large customers often "play one carrier off against another at the negotiating table."[50] Once again, this same strategy is as likely

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[47] See Attachment A at 4 ("Competitors cater to interexchange carriers and large business customers in particular vertical segments (particularly financial services, health care, and information transfer) commonly characterized as high-usage segments, in dense metropolitan areas.").

[48] Interexchange Competition Order, 6 FCC Rcd at 5887 [¶ 37].

[49] Id. [¶¶ 37-39].

[50] Id. [¶ 40].

to apply when businesses are obtaining high capacity dedicated transport services as it does when they are negotiating for long distance services. Furthermore, by dividing their traffic among various suppliers, large corporate end users develop relationships with a number of different carriers, thereby becoming "still more demand-elastic."[51]

Telecommunications carriers (and particularly IXCs) are responsible for a significant portion of the total demand for high capacity dedicated transport services. These companies have strong financial incentives both to minimize input costs and to maximize profits; they also have a comprehensive knowledge of the industry and relevant market areas. Carriers with the ability to "self supply" high capacity dedicated transport services will seek opportunities to shift demand away from the SBC Companies toward their own networks. Carriers have also traditionally shown no hesitation to use alternatives to the SBC Companies' high capacity dedicated transport services when a lower price is available elsewhere. Evidence from the major dedicated transport markets in the SBC Companies' service territory indicates that demand for the SBC Companies' services is price elastic, consistent with competitive market conditions.

D. Supply Elasticity

Supply elasticity measures the ability of carriers to respond to price increases by increasing the availability of telecommunications services. A relatively high market supply elasticity implies that carriers have sufficient capacity available (or can readily acquire additional capacity) to accommodate demand shifts away from any firm attempting unilaterally to increase

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[51] Id. at 5887-88 [¶ 40].

prices above competitive levels. High supply elasticities are therefore inconsistent with market power and typically are associated with competitive markets. If a carrier attempts to increase substantially its prices for high capacity dedicated transport services and if competitors have sufficient capacity "'to take away enough business . . . to make unilateral price increases . . . unprofitable,'" market power is absent.[52]

Throughout the MSAs identified in this petition, entrants have deployed their facilities in such a way as to maximize their ability to win the most lucrative customer accounts.[53] As Table 1 illustrates, with several hundred route miles of fiber optic cable deployed by competitors in many major high capacity dedicated transport markets, significant amounts of competitive capacity are available to discipline and constrain rival carriers' pricing behavior:

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[52] AT&T Non-Dominant Order, 11 FCC Rcd at 3303 [¶ 58] (quoting Interexchange Competition Order, 6 FCC Rcd at 5888 [¶ 45]).

[53] See Attachment C (maps of each of the 14 MSAs at issue in this petition, illustrating the extent of the regional networks of the SBC Companies' principal competitors); see also Attachment A at 4 (competitors "focus on small geographic areas when constructing fiber networks (particularly central business districts and business-intensive suburbs)").

TABLE 1[54]

MSA	Competitor Name as of 2Q98	Competitor Name as of 4Q98	Facility Type	Route Miles	Buildings on Network
Los Angeles	TCG	AT&T	Fiber	1000	200
Los Angeles	WorldCom	MCI WorldCom	Fiber	800	250
San Diego	Time Warner	Time Warner	Fiber	180	125+
San Diego	WorldCom	MCI WorldCom	Fiber	400	N/A
San Diego	TCG	AT&T	Fiber	400	200
San Francisco	TCG	AT&T	Fiber	450	N/A
San Francisco	WorldCom	MCI WorldCom	Fiber	226+	150+
St. Louis	TCG	AT&T	Fiber	300+	100-200
St. Louis	WorldCom	MCI WorldCom	Fiber	150+	N/A
DFW	WorldCom	MCI WorldCom	Fiber	700	250
DFW	TCG	AT&T	Fiber	500	N/A
Houston	TCG	AT&T	Fiber	600-800	N/A
Houston	WorldCom	MCI WorldCom	Fiber	200	N/A
Houston	Time Warner	Time Warner	Fiber	400	N/A

Of course, competitors are not limited by the reach of their own regional networks. Through collocation in the SBC Companies' central offices, competitors can provide high capacity dedicated transport services even to customers who are miles away from the competitors' existing regional networks.

Quality Strategies has also estimated that, consistent with high supply elasticities, a significant amount of unused network capacity is available in particular MSAs.[55] Available

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[54] The data for this table comes from the Quality Strategies Study, see Attachment A.

[55] For example, as of the second quarter of 1998, an estimated 50% of AT&T's regional network capacity was available in the St. Louis market area, while 40% was available in its Dallas-Ft. Worth market area network capacity was available. Id. at 24, 33. Similarly, Quality Strategies estimated that 70% of MCI WorldCom's regional network capacity could have accommodated new demands for service in San Francisco (id. at 19), while an estimated 85% of its regional network was available in San Jose (id. at 22).

capacity on competitors' networks appears more than sufficient to thwart any attempts by carriers unilaterally to increase their prices substantially above competitive levels.

E. Cost Structure, Size, and Resources

The cost structure, size, and resources of the SBC Companies confer on them no unfair advantage, as reflected by the success that facilities-based competitors in the high capacity dedicated transport services market have had in the largest urban areas in the SBC Companies' territories. To the extent competition rewards efficiency, those suppliers operating more efficiently (i.e., with lower overall cost structures) will be more successful than their less efficient rivals. Similarly, to the extent that SBC Companies' customers benefit from economies of scale and scope, these production efficiencies are not the result of "unfair" competitive advantages.

Furthermore, the IXCs' vertical integration strategies may provide marketing opportunities that are currently unavailable to the SBC Companies. For example, high capacity dedicated transport services might be combined with retail long distance services to create variations of contracts, service packages, and special promotions that the SBC Companies are precluded from offering.

Moreover, the SBC Companies' facilities-based competitors are not small, start-up firms operating within modest budgets. The financial resources available for network investment and marketing campaigns to such major corporations as MCI WorldCom, AT&T, Time Warner, and Cox Communications are certainly no less than the financial resources available to the SBC Companies for these purposes. Large corporations like AT&T and MCI WorldCom have long-

standing contractual relationships with major suppliers of telecommunications equipment that include price discounts and other features. Finally, AT&T, MCI WorldCom, and Time Warner are well known to the large corporate end users and telecommunications carriers that use high capacity dedicated transport services. There are simply no aspects of the SBC Companies' cost structure, size, or resources that can be regarded as constituting an "unfair" advantage when compared to the cost structure, size, and resources of their competitors.

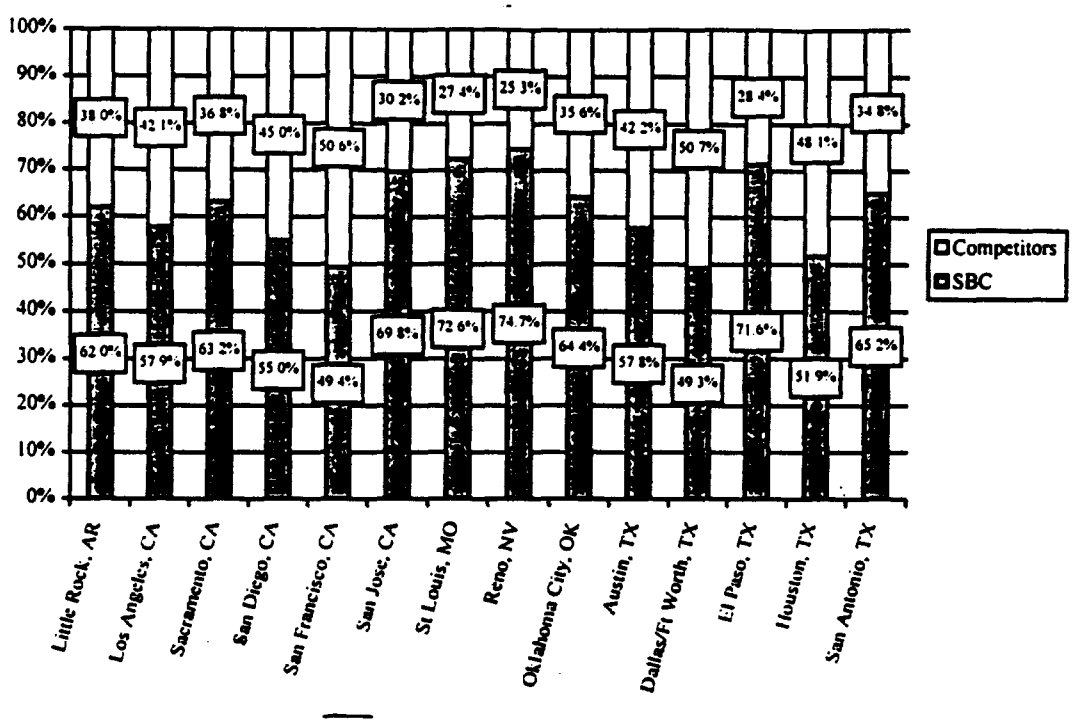
IV. THE COMMISSION SHOULD FORBEAR FROM REGULATING THE SBC COMPANIES AS DOMINANT CARRIERS IN THE MARKET FOR HIGH CAPACITY DEDICATED TRANSPORT SERVICES IN SPECIFIED MSAs

A. Requested Regulatory Relief

Instead of the onerous regulatory requirements currently applicable, the SBC Companies should be allowed to carry out their business in the high capacity dedicated transport services market in each of the 14 MSAs under the same rules and with the same flexibilities that their competitors enjoy. To the extent that Part 61 tariffing rules and Part 69 access charge rules apply only to the SBC Companies and not to their competitors in the high capacity dedicated transport services markets described in this petition, the Commission should forbear from enforcing them.[56]

[56] On behalf of the SBC Companies, SBC is requesting that the Commission forbear from enforcing, in each of the 14 MSAs identified in this petition, any access charge rules that apply solely to the incumbent SBC Companies and not to their competitors.

OVERALL HIGH CAPACITY MARKET SHARE RESULTS



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Little Rock	62.0%	38.0%
LA-Orange-Riverside	57.9%	42.1%
Sacramento	63.2%	36.8%
San Diego	55.0%	45.0%
San Francisco	49.4%	50.6%
San Jose	69.8%	30.2%
St. Louis	72.6%	27.4%
Reno	74.7%	25.3%
Oklahoma City	64.4%	35.6%
Austin	57.8%	42.2%
Dallas/Fort Worth	49.3%	50.7%
El Paso	71.6%	28.4%
Houston	51.9%	48.1%
San Antonio	65.2%	34.8%

LITTLE ROCK - COMPETITIVE LANDSCAPE

Overview

The Little Rock-North Little Rock MSA has a population of approximately 480,000 people. Its most significant industries have traditionally been agricultural products, bauxite mining, and lumber. While this is true, Little Rock is the center of government activity as the capitol of Arkansas, accounting for approximately 19.3% of the total employment in the area. It also is the headquarters for the state's financial industry – banks, investment firms, and insurance companies -- accounting for approximately 49.6% of the state's employment in these areas and 8.1% of the area's total employment. The Little Rock area is expected to continue to grow steadily in the near future. Competitors include WorldCom, Alltel, e.spire and Hyperion.

Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Little Rock	62.0%	38.0%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
Little Rock	WorldCom	Fiber	30	Unavailable
	Alltel	Fiber	Unavailable	6
	e.spire	Fiber & Microwave	90	40
	Hyperion	Fiber	120	21

WorldCom

WorldCom, which recently completed its acquisition of MCI continues to provide HICAP services over its 30-mile network in Little Rock.

WorldCom installed a Lucent 5ESS switch in Little Rock and began offering local switched services in the first quarter of 1997. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services. The company is collocated with four Southwestern Bell switches in Little Rock, which give it access to 86% of Southwestern Bell's 170,000 customers in Little Rock.

WorldCom has a 100% SONET fiber optic network in the area, with approximately 30 route miles of fiber. Company representatives claim the company has fiber in all of the major multi-tenant buildings downtown. The company's current lone SONET ring in the area runs at OC-12. Company representatives estimate the portion of network capacity that is currently utilized to be 10%.

The network extends from downtown along Capitol St. to the corridor of Bowman and Shackleford roads and loops back to downtown along 13th St. WorldCom/Brooks also has a fiber-optic loop in North Little Rock, serving the customer base to the north of the Arkansas River.

e.spire

e.spire's 100% SONET fiber optic network has been functional since January of 1995. The company has built out its network over the last year, bringing its current number of route miles to 90. They continue to use their Lucent Technologies 5ESS switch and have connected over 40 buildings in the area to the network. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services.

e.spire's downtown network is completed underground, but the expansions will include aerial fiber. Additionally, e.spire has microwave facilities to serve customers far removed from the fiber network. e.spire also has an ATM POP in Little Rock.

Alltel

Alltel Communications has installed a DMS500 switch and a fiber network in Little Rock. At the present time they have only 6 buildings on this network. They offer 24 hour, seven days a week customer service and a range of products including basic business lines, T1, PRI, Internet access, paging, centrex packages and calling plans. They are presently collocated in three central offices.

Hyperion

Hyperion Little Rock installed its Lucent Technologies 5ESS switch in December of 1997. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services.

The company has constructed a network, which currently consists of 120 route miles of fiber and is connected to approximately 21 buildings in the area. The network is composed of six SONET rings, one of which runs at OC-12 and 5 of which run at OC-3. Company representatives estimate the portion of network capacity currently utilized to be 20%.

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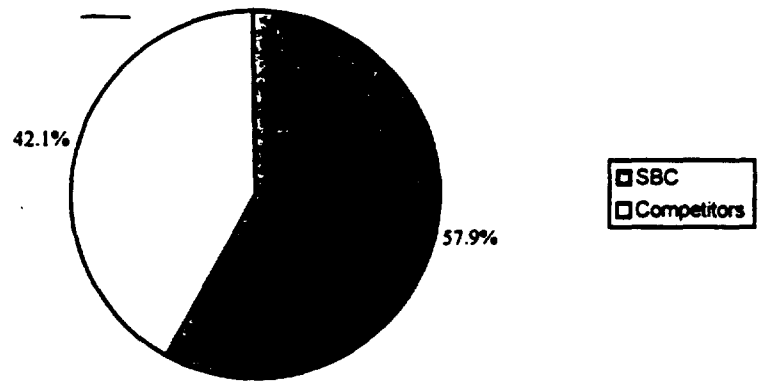
LOS ANGELES - ORANGE CTY. – RIVERSIDE – COMPETITIVE LANDSCAPE

Overview

Los Angeles is the largest metro area in SBC's territory, and the second largest nationwide. The greater Los Angeles metro area, which includes Orange County and Riverside, has a population of over 15 million people, providing vast opportunities for competitors to offer a diversified portfolio of telecommunications services to the business and residential markets. Over the last two years, competitors have found ways of converting SBC customers and securing growth in the local exchange and high capacity markets through investments in local infrastructure and intense marketing efforts.

The competitors have each installed several hundred miles of fiber and connected hundreds of buildings in order to operate networks and serve customers in business-intensive regions in Los Angeles and Orange Counties. The competitor's networks are capable of carrying several thousand conversations simultaneously. These networks are equipped with vast amounts of available capacity, creating an attractive alternative for carriers and large businesses with heavy voice and data requirements. ICG, MCI, WorldCom, and TCG have installed network backbones capable of transmitting voice and data at speeds up to OC-48, although fiber spurs and distribution rings may operate more slowly. The main competitors for High Capacity services in the Los Angeles metro area are WorldCom, TCG, MCI, ICG and NextLink.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
LA-Orange-Riverside	57.9%	42.1%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
LA-Orange-Riverside	WorldCom	Fiber	800	250
	TCG	Fiber	1000	200
	MCI	Fiber	50	50
	ICG Telcom	Fiber	200	300
	NextLink	Fiber	200	150
	GST	Fiber	280+	Unavailable

WorldCom

WorldCom is the largest competitor in the Los Angeles area. WorldCom offers local switched services in Los Angeles, routing calls through an Ericsson switch that has been active since January 1995. The company has over 250 lit buildings connected to an extensive fiber network; the newly merged MCI WorldCom's network has over 800 miles of fiber and extends from Irvine in the south to Sherman Oaks in the north, along the coast through Santa Monica, El Segundo, Long Beach and Costa Mesa, and through Orange, Anaheim and downtown Los Angeles. In addition to fiber in the downtown area WorldCom also gains a DMS500 switch, which has been active since 4Q96, through its merger with MCI. The Nortel switch is capable of routing a diverse portfolio of telephony services. WorldCom monitors its networks from its control center in Oakbrook, IL.

WorldCom bundles its telephony services and provides a single invoice for local, long distance, international service, Internet access, and calling card charges. The company also offers volume discounts, and a customer can increase its "volume commitment level" by purchasing all of its telephony needs through WorldCom.

TCG

TCG has a 5ESS switch in LA that has been active for about three years, routing various types of services throughout the company's extensive network. TCG has a very large network consisting of approximately 1,000 route miles and covering 37 cities in the greater Los Angeles metro area and parts of Southern California. There are 385 route miles in the downtown Los Angeles area alone that serve business customers' varying telephony needs. The remainder of the TCG's fiber network covers parts of Southern California including El Segundo, Santa Monica, Irvine, Long Beach and Pasadena. There are just over 200 buildings lit in the Los Angeles area.

Additionally, TCG runs a Network Operations Center in Staten Island, NY from which it constantly monitors networks and coordinates responses to problems. TCG technicians report the network operations facility allows the company to spot problems before the end-user does and alleviate them before transmission outages occur. Furthermore, TCG customers often report hearing of problems from TCG representatives before it has affected service and been noticeable to them. TCG will work with its customer's long distance carrier to provide a total service solution.

MCI

MCI, recently acquired by WorldCom, has a small fiber network consisting of approximately 50 route miles and a Nortel DMS500 switch. In contrast to the other three major providers, MCI is much less averse to relying on other carriers to help it reach its customers. The company has connected fewer than 50 multi-tenant buildings, and therefore the vast majority of MCI's high capacity customers are located away from its network. The majority of MCI customers in the area receive service via type II connection to the MCI central office (or long distance POP). In this scenario, MCI will lease a T-1 from the incumbent (or another provider) to provide the link. It prefers this arrangement to pure service resale service because it controls part of transmission and eliminates certain cost elements. However, MCI always attempts to serve its most valuable account over it own facilities (frequently dictating which buildings in a central business district are connected to the network).

ICG

ICG has dramatically increased the scope of its fiber presence it the Los Angeles MSA over the past several years by establishing competitive alliances with utility operators across the Golden State. Through these relationships, ICG has added over one hundred route miles to its original fiber backbone since 1996. The company has a total of 200 route miles, which includes a 117-mile ring in Orange County and downtown Los Angeles, and its network stretches from Oxnard in the Northwest to San Bernadino in the Southeast. Additionally, ICG built its network according to SONET ring architecture to allow maximum reliability and redundancy. ICG routes traffic through its 5ESS switch on Grand Avenue that has been active since 1995, allowing the company to offer a diverse telephony package. To reduce the amount it relies on other providers, ICG has connected more than 300 buildings to its Los Angles area network. This allows the company to provision its own service and manage lines and circuits end to end. Additionally, all metropolitan area networks are monitored constantly from ICG's network control center in Englewood, Colorado.

NextLink

NextLink became a player in the Los Angeles area in 1996 when it purchased Linkatel Pacific's network, although the company has only offered local services in the metro area for just over a year. NextLink operates a 200-mile network in the Los Angeles and Orange County area, and unlike other competitors, NextLink focuses its attention on areas outside the city instead of downtown. Its network runs along the coast through El Segundo, Gardena and Long Beach and through Anaheim, Bellflower and Santa Ana. NextLink has installed a DMS500 switch that is capable of handling local, toll, operator and long distance services. The company currently has over 150 buildings on-net.

GST

GST operates 500+ miles fiber network from Los Angeles to San Francisco, with over 130 route miles of fiber in its Los Angeles network. GST employs a Nortel DMS 500 switch in Los Angeles. The GST Los Angeles network is one of four GST operational networks in California. The majority of the network links the cities of Riverside, Rialto, and San Bernardino.

GST offers a full line of dedicated and switched services to on-net customers in metropolitan Los Angeles. GST began offering local dialtone services during third quarter, 1996. On October 1, 1996 Pacific

Lightwave finalized terms to purchase Call America, a facilities-based long-distance reseller based in Central California with customers in the following areas: Fresno, Salinas, San Luis Obispo, Santa Barbara, and Ventura. Additionally, GST purchased Tri-Star Residential Communications Corp., a shared tenant service provider, in October 1996.

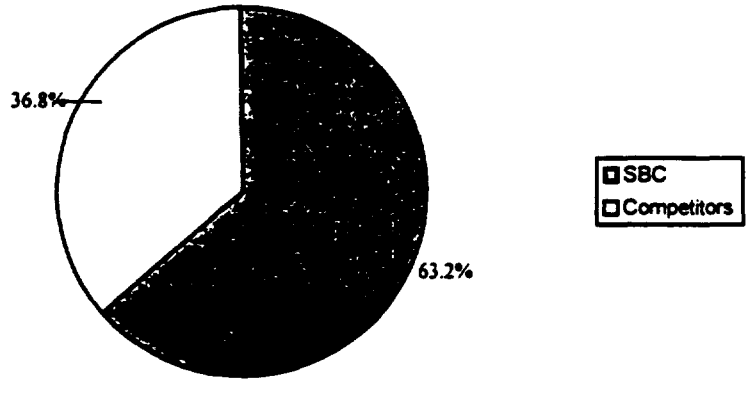
GST operates a 151-mile fiber network that serves the Riverside, San Bernardino, and Rialto areas. This network connects to the following three networks in Los Angeles:

• 44-mile network in Ontario	• 5-mile network in Monterey Park
• 18-mile network in City of Industry	

SACRAMENTO – COMPETITIVE LANDSCAPE

Overview

Sacramento, the capital of California, is located northeast of the San Francisco Bay area. The city has a diversified economy with companies from the aerospace, technology, furniture and pharmaceutical industries. Companies like Intel, Campbell Soup Company, Hewlett-Packard and NEC Electronics operate facilities in the area, and a new business park is being planned to accommodate more businesses. The Mather Field, near Rancho Cordova, is being transformed from a military facility into a business center and its list of current tenants includes McGraw Hill, Sub Sea Systems, the California Department of Forestry, and FEMA. Some companies have already started using the cargo and runway facilities also, such as Airborne Express, UPS, Burlington Air Express and Emery Air Freight. With a fairly sizable demand for high capacity services, competitors own and operate extensive networks in Sacramento, serving the downtown business districts and other outlying business communities. In particular, WorldCom and Electric Lightwave have geographically expansive networks able to carry an array of telephony services. ICG also competes for high-capacity service in the Sacramento area, although it only operates in the downtown business district.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Sacramento	63.2%	36.8%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
Sacramento	WorldCom	Fiber	200	200 +
	Electric Lightwave	Fiber	200	100 +
	ICG Telcom	Fiber	Unavailable	20

WorldCom

With the completion of it merger with Brooks Fiber Properties, WorldCom is now able to offer local and long distance services in the Sacramento area. WorldCom acquired Brook's network, which consists of approximately 200 route miles and two switches. WorldCom has an Ericcson switch designated for long distance services and a Lucent 5ESS that was installed in the first quarter 1996. The 5ESS is capable of carrying a variety of traffic such as local, long distance and data. The fiber runs from West Sacramento through downtown and into Rancho Cordova, Citrus Heights and El Dorado Hills. WorldCom's backbone is configured according to SONET ring architecture, and the company has brought more than 200 buildings on-net. Before WorldCom merged with Brooks, Brooks attempted to connect the majority of its customers directly to its fiber network through large-scale buildout and substantial capital investment

ELI

Electric Lightwave Inc. (ELI), which has been operating in the Sacramento area since 1994, has a DMS 500 switch capable of routing a diverse portfolio of communications services. The switch can handle local, long distance and data traffic and was installed in February 1997. Currently, ELI's network spans approximately 200 route miles in the Sacramento area and covers Rancho Cordova, Carmichael, El Dorado Hills, and Folsom. The company plans to install an additional 40-mile extension into Roseville in the near future. The network transmits voice and data at speeds up to OC-48 and is constructed according to SONET ring architecture. ELI has more than 100 lit buildings in the Sacramento area. To address network difficulties, ELI has established a network-monitoring center in Bellevue, WA that operates all day, every day. End-users are to report difficulties with service to their account manager or call the 800 technical support line (there is one for end-users and one for carriers).

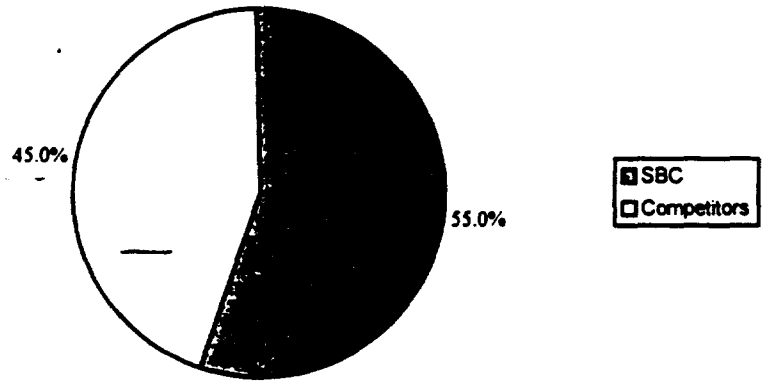
ICG

ICG has a very limited presence in Sacramento, serving just the downtown central business district. The company provides facilities-based, switched service via a Lucent 5ESS switch located at 770 L St in downtown. Additionally, ICG has connected fewer than 20 buildings to its network in the state capital. ICG began offering local switched services in the second quarter of 1997, but had been offering digital dedicated links since 1996. Furthermore, ICG has microwave links connecting its Sacramento and Bay Area networks.

SAN DIEGO – COMPETITIVE LANDSCAPE

Overview

San Diego is the second-largest city in California and the sixth largest metropolitan area in SBC's territory. San Diego, located in the southwestern part of the state on the San Diego Bay, has been a busy commercial port and a hub for US naval operations. Although the naval training center is scheduled to close, San Diego has a diverse economy with businesses in the following industries: electronics, aerospace, oceanography, agriculture, and medical and scientific research. San Diego is also a hotbed of competition for high capacity services. Time Warner, WorldCom, TCG, MCI and ICG all vie for large business customers. The capacity available on competitor networks is extensive with each competitor operating backbones up to OC-48. Time Warner, WorldCom and ICG each own expansive networks covering downtown San Diego as well as La Jolla, Mission Valley and Del Mar.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
San Diego	55.0%	45.0%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
San Diego	Time Warner	Fiber	180	125+
	WorldCom	Fiber	400	Unavailable
	ICG Telcom	Fiber	150-170	Unavailable
	TCG	Fiber	400	200
	MCI	Fiber	20-30	35+

Time Warner

In San Diego, Time Warner operates a network that totals 180 route miles and stretches from La Jolla in the northwest to the southern suburbs of San Diego. A variety of traffic is routed via a Lucent 5ESS switch that has been active for two years. Time Warner has more than 125 lit buildings and its customers include large corporations such as Sony, Hewlett Packard and QualComm. Time Warner is particularly adept at constructing transmission facilities after years of experience in the cable industry (not to mention the investment in construction equipment, rights of way, and franchise fees). Time Warner's network features an OC-48 backbone; however individual distribution rings frequently run at lower optical speeds or at the DS-3 level. Time Warner has built its network according to SONET ring architecture featuring route diversity, counter-rotating ring configuration, and electronic redundancy. Time Warner rolled out local switched service earlier this year.

WorldCom

WorldCom's fiber backbone boasts transmission speeds up to OC-48 (although several distribution routes run at OC-3 or OC-12). The combined networks of MCI and WorldCom span 400 route miles and runs North along Interstate 5 past La Jolla to Poway and South through La Mesa, Mission Valley and downtown San Diego. WorldCom has two switches in the San Diego metro area. Its Ericsson switch is located on Overland Dr. The company also recently installed a DMS250 located on Complex Dr. that will be upgraded to a DMS500 later this year or early next year. Nortel's DMS250 is a high capacity system designed for interexchange carriers and it handles high-speed voice and data communications for long distance customers. While the modular, scaleable system architecture of the DMS250 allows a provider to increase processing and trunk capacity (up to 100,000 trunks), the DMS500 will allow WorldCom to combine local, toll, long distance and data services over the same number of trunks. WorldCom will also have the capability to bundle its service and better serve San Diego's high capacity market.

TCG

TCG provides a diverse package of services via a 400-mile network that connects over 200 lit buildings in the San Diego area. TCG entered the local switched market in 3Q96 when it installed a Lucent 5ESS switch in the Sorrento Valley at the Sorrento Towers.

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ICG

Although ICG's San Diego network has been operational since 1992, it has only been managed by ICG since the second quarter of 1996 when ICG purchased the facilities from Linkatel Pacific. Currently, the network measures 150-170 route miles and is capable of serving customers in San Diego's central business district and in the suburbs, such as Mission Valley, Chula Vista, Sorrento Valley, La Jolla, and Kearney Mesa. ICG's San Diego network figures prominently into that company's plans for the state, where it now operates networks in the five largest markets. Like in other cities, ICG's backbone operates at OC-48, allowing for excess capacity to serve the area's largest businesses and several interexchange carriers. Furthermore, ICG has partnered with several electric utility providers in the Golden State and has the capacity to expand its local networks very rapidly.

MCI

MCI's San Diego network has been in operation since the middle of 1995 when it began offering facilities-based high capacity services to business customers in the area. Currently, it operates two SONET rings, one in San Diego's central business district and the other in Mission Valley. Together, the rings amount to 20-30 route miles of optical fiber that connects over 35 single and multi-tenant buildings. Like other competitive local exchange carriers in the metro area, MCI operates an OC-48 backbone with virtually limitless capacity to carry local and special access traffic. In San Diego, MCI routes local traffic via a class 5 Siemens EWSD central office switch. Like all of its metropolitan area networks, MCI has built several features into its San Diego facilities to ensure its customers never lose the ability to communicate. Each ring is self-healing with electronic redundancy capable of rerouting traffic in milliseconds. Additionally, MCI has built-in route and central office diversity.

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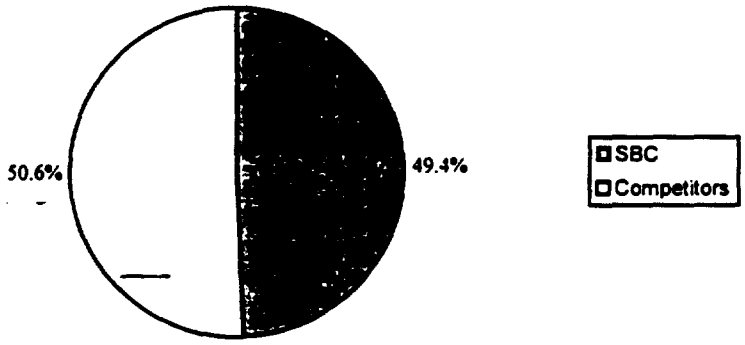
SAN FRANCISCO – COMPETITIVE LANDSCAPE

Overview

San Francisco, SBC's second most competitive metro area, is home to headquarters of several Fortune 500 companies. The greater San Francisco-Oakland-San Jose metropolitan area is the fifth-largest nationwide with more than 6 million people. While this is true, San Francisco alone has a population of just more than 1.5 million people. Job growth stands at 1.5% (from 1996-1997) and San Francisco boasts a strong economy with a diverse business base. Competitors offer diverse portfolios of telephony services and are able to provide local, long distance and data services over SONET-based platforms. In addition, each competitor has an extensive fiber network surrounding the entire bay area. As of 2Q98 the following companies are competing in the San Francisco Bay area: WorldCom, MCI, TCG, GST and ICG.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
San Francisco	49.4%	50.6%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
San Francisco	WorldCom	Fiber	226+	150+
	MCI	Fiber	20	26
	TCG	Fiber	450	Unavailable
	NextLink	Fiber	200	Unavailable
	ICG Telcom	Fiber	Unavailable	Unavailable
	GST	Fiber	130	200

WorldCom

WorldCom has a large presence in the San Francisco Bay Area with 19 miles of fiber in downtown San Francisco and 77 route miles of fiber in Oakland. The spur between the two cities spans the Bay via a Bay Area Rapid Transit (BART) Transbay Tube. Through its merger with MCI, WorldCom will add an additional 20 miles of fiber in downtown San Francisco. WorldCom began offering facilities-based local service to Bay Area customers in July 1996, and the company provides local switched services through a five series Ericsson AXE switch. The network backbone operates at speeds up to OC-48 and is constructed in a self-healing SONET architecture. Currently, the network runs at approximately 30% capacity, according to company representatives. The greater Bay Area network, which consists of an additional 130 route miles, is primarily composed of five different SONET rings operating at OC-48 and over 150 buildings. The Silicon Valley loop services the Cupertino, Santa Clara, San Jose and Sunnyvale communities.

MCI

MCI currently operates a fiber optic network in the San Francisco Bay Area spanning approximately 20 route miles. The company's San Francisco network has been active since 1995. In addition to San Francisco's central business district, MCI operates a small fiber spur servicing business customers in Oakland. Each of MCI's two SONET rings operate at speeds up to OC-48 and have the capacity to be upgraded to OC-192 in the near future. In downtown San Francisco, MCI's network stretches from Clay Street to the north to the China Basin in the south. Additionally, the network extends from Front Street in the east to Van Ness Street in the west. The connection between San Francisco and Oakland is made via the BART (Bay Area Rapid Transit) Transbay tubes connecting the two sides of the bay. Currently, there are over twenty lit buildings in San Francisco and six in Oakland. In the last week of January, MCI began offering local services to business customers in the greater San Francisco area. MCI switches traffic in San Francisco via a class five Siemens switch located downtown.

NextLink

NextLink became a player in the greater San Francisco Bay Area in 1998 when it installed a 200-mile network. Its network serves Fremont, Milpitas, San Jose, Santa Clara, Sunnyvale, Menlo Park, Mountain View and Palo Alto. NextLink has installed a DMS500 switch that is capable of handling local, toll, operator and long distance services.

TCG

TCG received CLEC authority in California in 1996. The company has 450 route miles in the entire Bay Area stretching from downtown San Francisco, east to Oakland, south to San Jose and around the peninsula. The network also extends north to Napa County and Sonoma County. TCG operates a self-healing SONET architecture network consisting of seven SONET rings, and the backbone runs at speed of up to OC-48. TCG is able to offer a full array of dedicated and switched services, routing calls over its Lucent 5ESS switch, which was installed during the fourth quarter 1996.

ICG

ICG currently operates a fiber optic network with an OC-48 ring that serves the entire San Francisco Bay Area. The network was acquired from Bay Area Teleport and has been in operation for almost a decade. Most of ICG's fiber backbone extends through San Francisco, Oakland, and the East Bay. ICG in San Francisco operates a 5ESS switch in downtown San Francisco that has been operational since early 1997. Through its switch, ICG is able to offer a full array of telecommunications services. The company began offering local dialtone services, including Centrex to on-net customers during third quarter 1996. The network was acquired from Bay Area Teleport and has been in operation for almost a decade.

GST

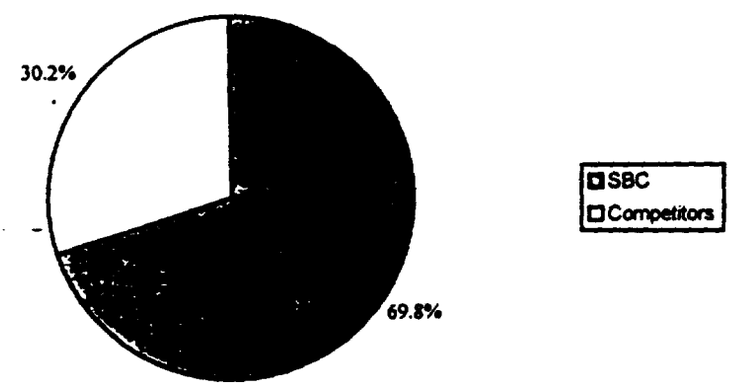
GST has over 130 route mile fiber in the greater San Francisco Bay Area with fiber distribution rings in Oakland, Walnut Creek, San Ramon, Pleasanton and Concord. The GST Bay Area network will also service Berkeley, Fremont, Hayward, Lafayette, Livermore, Vallejo and San Jose. GST is in the process of increasing its fiber presence and buildings in downtown and the East Bay. GST's strategy is to follow the migration patterns of businesses as they move from downtown business districts to expanding suburban areas, such as Walnut Creek. There are over 200 buildings on-net in the greater San Francisco Bay area. GST is currently offering a full range of dedicated and switched service and has a NORTEL DMS 500 switch in San Francisco.

During the third quarter of 1996, GST completed the acquisition of the telephone infrastructure at the Mare Island Naval Shipyard in Vallejo. GST has subsequently linked Mare Island to its existing 130 route mile Bay Area network. The former naval shipyard was converted into a commercial office development and GST began providing local dialtone and long-distance services in November 1996.

SAN JOSE – COMPETITIVE LANDSCAPE

Overview

San Jose, located southeast of San Francisco in Santa Clara County, is considered part of the greater Bay Area, which also includes Oakland. The San Francisco-Oakland-San Jose metropolitan area is the fifth largest nationwide, although San Jose alone has a population of just more than 1.5 million people. San Jose, which witnessed job growth of 4.2% from 1996-1997, has experienced an influx of a large number of high-tech companies. Recently, San Jose has become the center of the Silicon Valley as an increasing number of large businesses have moved to the surrounding areas. Two competitors specifically target the San Jose area – WorldCom and TCG – by extending their networks from San Francisco and Oakland to provide high capacity local, long distance and data services.



Source: QUALITY STRATEGIES, Washington, D.C.

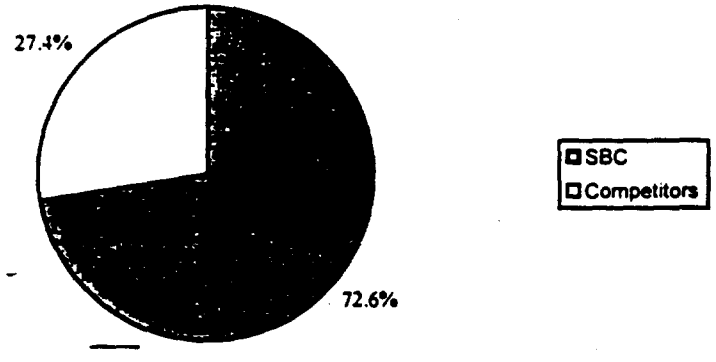
MSA	SBC	Competitors
San Jose	69.8%	30.2%

ST. LOUIS – COMPETITIVE LANDSCAPE

Overview

St. Louis is a major river port, rail hub, and financial center. Manufacturing is important to the economy, and St. Louis' highly developed industries include automobiles, aircraft and space technology, metal fabrication, beer, steel-making, chemicals, food processing, and storage and distribution. The population in the city is approximately 350,000 people, with the metropolitan area figure at approximately 2,500,000.

There were three main competitors in the High Capacity market during the second quarter of 1998, TCG, WorldCom and ICI.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
St. Louis	72.6%	27.4%

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Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
St. Louis	TCG	Fiber	300+	100-200
	WorldCom	Fiber	150+	unavailable
	ICI	Fiber	60	unavailable

TCG

TCG has been offering High Capacity services in St. Louis since 1993. TCG was recently acquired by AT&T.

TCG has a Lucent Technologies 5ESS switch, which can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, the switch can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services.

Excluding SBC, TCG operates by far the most extensive network in the greater St. Louis area. It has been in operation for several years and capable of offering local switched services since late in 1996. Currently, TCG's fiber network spans over 300 route miles and connects between 100 and 200 buildings in the city as well as in the suburbs. TCG technical professionals indicate that TCG operates the most robust, reliable network in the greater St. Louis area, with 15 SONET rings running at OC-48. Company representatives estimate the network currently runs at 50% capacity. The backbone is capable of voice and data transmission at speeds up to OC-48, while individual spurs and distribution rings operate more slowly (customer premises generally support DS-3 or OC-3 interfaces). In addition to downtown St. Louis, TCG has installed fiber in Jennings, Overland, Chesterfield, St. Charles, and Creve Coeur. TCG attempts to construct networks that allow it to serve each business-intensive locality in a given metro. This significantly decreases its reliance on the RBOC for resold services or type II connections. At present, nearly 100% of TCG's service is self-provisioned; very little comes through resale. TCG monitors all of its local networks from its network operations center in Staten Island, NY.

WorldCom

WorldCom continues to operate its extensive network in St. Louis. The company acquired Brooks Fiber during the first quarter of 1998, and it recently merged with MCI.

WorldCom became a participant in the St. Louis market in 1995 when it first turned up service along its optical fiber network in the greater metro area. Although the original focus was downtown St. Louis, the network has grown to encompass over 150 route miles spanning the city and the following business-intensive suburbs: Creve Coeur, Westport, St. Charles, and the University of Missouri Research Park. Furthermore, WorldCom has connected over 100 single and multi-tenant buildings to its network via either type I or type II connection. WorldCom began offering local switched services in 1996 following the installation of its class 5 Ericsson AXE C.O. switch in early 1996. The network is monitored constantly at WorldCom's operations center in Oakbrook, IL.

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ICI

ICI (Intermedia Communications) has been a player in the St. Louis private line market since the first quarter of 1996 when it turned up service along its fiber network in the city's central business district. Since then, the company has increased the scope of its products and network dramatically. ICI began offering local switched services in July 1997 when it turned up its Nortel DMS-500 central office switch. Since early last year, ICI's network has grown to nearly sixty route miles and connects several single and multi-tenant buildings (the majority of which are downtown). ICI specializes in the construction of very modern networks equipped for large-scale data requirements of today's most communications-intensive buildings. The network backbone is capable of transmitting voice and data at speeds up to OC-48, while the majority of customer premises support standard electrical interfaces. ICI also operates frame and ATM transport facilities in the St. Louis area. ICI's St. Louis network is monitored in Tampa, FL

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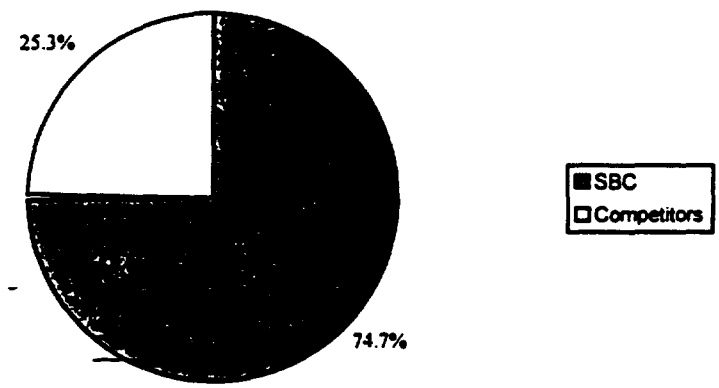
RENO – COMPETITIVE LANDSCAPE

Overview

Reno is one of the smallest metropolitan areas in SBC's region; it ranks 125th in population nationwide, with approximately 300,000 people. Reno is located in the western part of the state, 110 miles north of Yosemite National Park, and its surrounding towns include Carson City, Sparks and Sun Valley. In addition to the casino industry, Reno is home to several large companies including Comstock Corporation, Itronics and Sierra Pacific Resources. There is some demand for high-capacity services in the metropolitan area and WorldCom is SBC's main competitor.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Reno	74.7%	25.3%

Competitors

WorldCom

Brooks Fiber Properties previously operated WorldCom's Reno network until earlier this year when the two companies merged. WorldCom offers local switched services through its 5ESS switch that has been active for two years. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services. The fiber optic network is 100 route miles and runs throughout the downtown area. WorldCom has 18 buildings on-net.

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OKLAHOMA CITY – COMPETITIVE LANDSCAPE

Overview

Oklahoma City, the state capital, just makes it into the 50 largest metropolitan areas nationwide and it is one of SBC's more competitive territories. There are an abundance of opportunities for competitors in Oklahoma City's high-capacity market. The health services industry is expected to grow and there are aerospace, telecommunications and energy businesses located in the area. Additionally, the Tinker Air Force Base is not only a large employer, but it also presents an opportunity for competitors if the military should need to upgrade its system to handle high-speed services. The primary competitors for high capacity service in Oklahoma City are WorldCom and Cox Fibernet.

Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Oklahoma City	64.4%	35.6%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
Oklahoma City	WorldCom	Fiber	118	65
	Cox Fibernet	Fiber	1020	240

WorldCom

Earlier this year WorldCom completed its merger with Brooks Fiber Properties. Brooks operated a sizable network in the Oklahoma City area (one of its first networks) since 1994. WorldCom owns 500 route miles of fiber in the state of Oklahoma and maintains 118 route miles with speeds up to OC-48 in the Oklahoma City area. A company representative stated that 37% of the network is currently being used. WorldCom routes a diverse portfolio of communications services via a Lucent 5ESS switch that has the capacity to connect up to 100,000 trunks. The switch has been active for over three years.

Cox Fibernet

Cox Fibernet, a wholly-owned subsidiary of Cox Communications, has been operating in Oklahoma City since September 1994. Cox provides service to virtually all of the nations large long distance companies as well as other businesses (small and large) via its extensive network. Cox's network is 1020 route miles. It is built of 100% SONET transmission equipment and consists of 65 self-healing rings. These rings are capable of carrying traffic with speeds up to OC-48, and the company reports that it currently uses only 30% of its network. Voice, data and video services are routed via a DMS500 switch that has been active since March 1997. To ensure network reliability, Cox employs two diverse paths and uses a ring-in-ring architecture. In the event a fiber is cut, traffic can be routed through the second path. Cox also maintains a network operations center that monitors the network 24 hours a day. The center operates, administers, manages and maintains the company's switched, packet-switched, data and cable television network.

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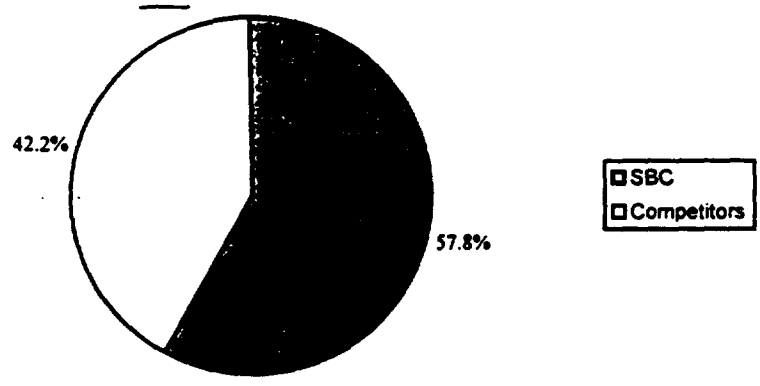
AUSTIN – COMPETITIVE LANDSCAPE

Overview

The current population for the greater Austin area is approximately 570,000 people. While Austin's main industries still are ranching, poultry, dairy, cotton, and grain, it has fostered a growing high-tech sector. Included in this segment of the economy is the University of Texas, Austin, which is a major center for research and development. It also includes major high-tech companies such as Dell Computer Corp., which has been adding thousands of jobs every year in recent history. Many of the PC maker's 7,500 jobs added during 1997 were in the Austin area. Additionally, the high-tech sector has a healthy share of start-up businesses, with 178 new high-tech start-up companies emerging in 1997. Government currently accounts for 20.9% of the jobs in the area, with the University of Texas, Austin, contributing significantly to that figure. However, the local economy has become less dependent on this sector in recent years and its size has declined from its 1988 share of 28.3%.

To the extent that the high-tech companies and the local economy as a whole continue to grow in the area (the former is to some extent tied to global markets such as Asia [e.g. Motorola]), the demand for HICAP local services is also expected to grow.

The three main competitors in Austin were e.spire, WorldCom (formerly Brooks) and Time Warner.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Austin	57.8%	42.2%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
Austin	e.spire	Fiber	20	115
	WorldCom	Fiber	80	Unknown
	Time Warner	Fiber	280	105

e.spire

e.spire has been operating as a facilities-based carrier in Austin, offering high-capacity and local switched services, since October of 1997. The company has a Lucent Technologies 5ESS switch and a network that currently consists of 3 route miles. e.spire intends to expand the network to 20 miles during the fourth quarter of 1998. It currently has connected 115 buildings to its network. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services.

They have recently launched a new service, e.spire PLATINUM. This service will allow small and medium sized business to receive a variety of voice and data services from a single carrier and one integrated invoice. This attractive bundling will also provide business customers with flat rate local service. This service is now being offered in 18 markets, including Austin, and will be offered in all of e.spire's markets by the end of 1998.

WorldCom

WorldCom (formerly Brooks) recently received all required approvals to acquire MCI. The new entity is MCI WorldCom. WorldCom added a Nortel DMS-500 switch to their existing network in January of 1998. The DMS-500 can handle from 480 to 10,000 trunks and can serve up to 1.5 million call attempts during the busiest hour of the day. Additionally, it can handle 1,000 to 100,000 lines, depending on how it is configured. The company's network currently spans 80 route miles. It contains 3 SONET rings that run at OC-12. Company representatives estimate the portion of network capacity that is currently utilized to be 45%.

Time Warner

Time Warner continues to expand its network in Austin. The company also recently entered into an agreement with IXC Communications to offer bundled local and long-distance service.

Time Warner added 30 route miles to its network in Austin that has been operational since 1994. This expands its coverage to 280 route miles of self-healing 100% SONET fiber. The network consists of 27 SONET rings, 26 of which run at OC-12 and 1 of which runs at OC-48. Company representatives estimate the portion of network capacity currently being used is 50%.

The company continues to use its Lucent Technologies 5ESS switch that it activated during the third quarter of 1996. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle

between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services.

There are 105 buildings connected to the network. The areas served by the network include the majority of downtown Austin, the University of Texas, West Lake Hills, and Rollingwood.

Time Warner also recently announced a two-year agreement with IXC Communications enabling Time Warner to offer bundled local and long-distance services to its business customers nationwide. Under terms of the agreement, IXC will provide a wide variety of long-distance, 800, operator assisted, directory assistance, and calling card services.

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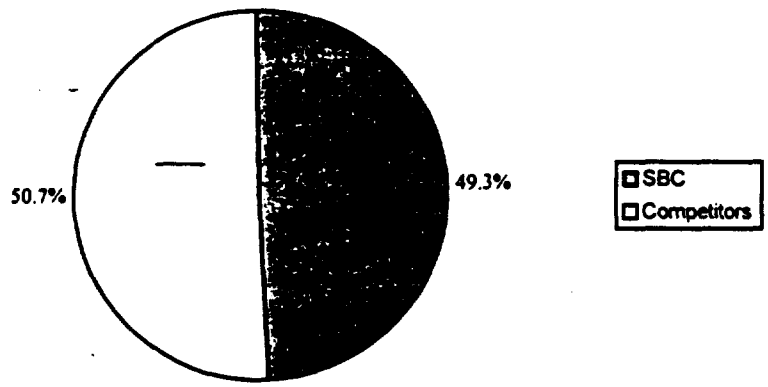
DALLAS – FT. WORTH – COMPETITIVE LANDSCAPE

Overview

Dallas, widely regarded as the most competitive communications market in the state of Texas, has a population of more than 3 million people. The greater Dallas-Fort Worth area, with approximately 4.5 million people, is the third largest in SBC's territory and ninth largest metro area nationwide; it is expected to be fourth nationally by 2010. Dallas is also SBC's most competitive high capacity market. Over the years SBC's high capacity market share has been significantly eroded and now stands at just 49%. With 16 of the nation's largest private firms and 15 of the largest public firms, the Dallas-Fort Worth area provides a large pool of potential HICAP customers. In addition, Dallas has witnessed a large construction boom through building new facilities and expansion since 1989. Last year alone, 308 facilities were built in the Dallas metro area. The competitors in the Dallas-Fort Worth metropolitan area are WorldCom, TCG, MCI and e.spire.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Dallas/Fort Worth	49.3%	50.7%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
DFW	WorldCom	Fiber	700	250
	TCG	Fiber	500	Unavailable
	MCI	Fiber	25	30
	e.spire	Fiber	220+	Unavailable

WorldCom

WorldCom (formerly MFS) has been operating its fiber network in the greater Dallas-Fort Worth area for several years. The company rolled out local services during the fourth quarter of 1996, although it had been offering access and data services prior to that time. WorldCom is a facilities-based local provider with one DMS500 switch and 700 route miles of fiber across the Dallas-Fort Worth metro area. WorldCom's switch has been active for six months, and has the capabilities to connect up to 100,000 trunks and to carry a multitude of services. With the completion of WorldCom's acquisition of MCI, the company will gain an additional 25 miles of fiber, an MCI DMS100 switch that has been operational since December 1997, and 30 lit buildings. WorldCom will boost its total number of on-net buildings to over 250. MCI's switch is located about 15 miles northeast of Dallas in Richardson, and it serves customers within a 20-mile radius of Dallas. However, the DMS100 switch was designed for local level end-office use.

Large business customers can connect directly to long distance providers through WorldCom. Although WorldCom prefers to provision and control circuits end to end, it is known to resell service to customers far removed from its fiber network.

TCG

TCG has a 5ESS switch installed that has been operational since 1996. The switch routes local, long distance and data services over the company's 500-mile network. The network, which has been operational since 1991, consists of four SONET rings and runs through the central business district in downtown Dallas and extends into Irving and Las Colinas and northward to Carrollton, Addison, Richardson and Plano. TCG officials report that the network is currently operating at 60% capacity. Additionally, in case of an outage, TCG will correct problems with switched lines or circuits within two to three hours. For problems with any circuit or line billed by TCG to the end-user, it operates a trouble-reporting 800 line that is available 24 hours a day, seven days a week.

MCI

MCI operates two SONET rings in Dallas' central business district (over 25 miles of fiber) connecting 30 of the area's larger buildings. MCI rolled out local switched services in 4Q97 when it turned up its Nortel DMS 100 central office switch in its downtown node. Unlike TCG and WorldCom, MCI generally does not build geographically expansive networks capable of reaching outlying suburbs. Instead, it relies on the RBOC and other carriers to provide it with type II service (with a T-1 link between the customer premise and the MCI central office) or wholesale lines that it can resell to its customers.

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e.spire

Of the facilities-based competitors in the Dallas area, none has been more active in expanding its network over the last year than e.spire. Currently, it operates a 220+ route mile network serving business customers throughout the Metroplex. Originally, e.spire's network was confined to Fort Worth's central business district, although it has been expanded to serve other areas.

All of e.spire's metropolitan area networks feature route diversity, electronic redundancy, and backup power supplies. The fiber backbone is capable of transmitting voice and data at speeds up to OC-48 (although most distribution rings operate at lower optical or electrical speeds). e.spire's network in the greater Dallas area is composed entirely of optical fiber; although type II transmission may occur over LEC copper facilities. To supplement its private line and data product offerings, e.spire began offering local switched services in the fourth quarter of 1996.

In 1996, e.spire installed a Lucent 5ESS central office switch in its Fort Worth node to route local and intraLATA traffic. Recently e.spire installed a second Lucent 5ESS switch in Dallas.

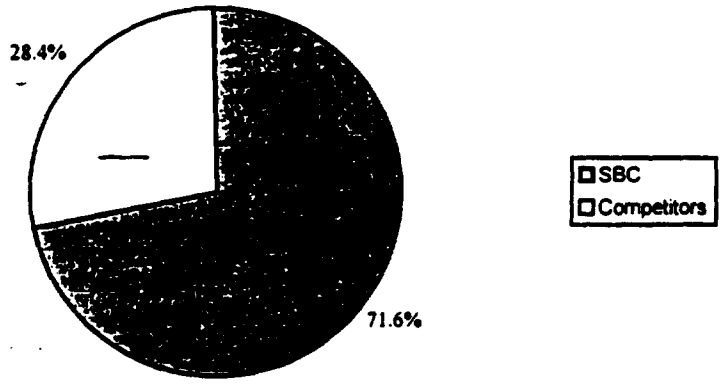
Thus far, e.spire has concentrated heavily on increasing its fiber presence in the greater Dallas area; however, it will adhere to a different philosophy during 1998. e.spire marketing professionals report that connecting buildings to the network has become a higher priority than adding route miles. This is particularly true of business-intensive suburban areas. This will allow it to control lines and circuits end to end and rely less on type II connections and resale.

e.spire has an aggressive national agenda as well. It has installed 20 switches to date and intends to activate 5 new Lucent 5ESS-2000 by the end of 1998. By the end of the second quarter of 1999 it plans to have installed 36 switches.

EL PASO – COMPETITIVE LANDSCAPE

Overview

Once a thriving manufacturing area, producing goods ranging from thermometers to blue jeans, this sector has declined in the last five years in El Paso. Companies such as Levi Strauss, Wrangler, Lee and Tex-Mex Apparels have slowly exited this depressed area for lower-wage workers across the border. Prospects in the near future appear dismal as El Paso is ranked in the top 10 of the fastest growing metropolitan areas in terms of population, while it has an unemployment rate well above the national average (11.4%). El Paso, the 60th largest metropolitan area nationwide, is referred to as having a future of "growth without prosperity." Slowly, the community has begun to train people for higher-skilled jobs. For example, Acer Computer has opened a computer assembly plant in the area. However, El Paso currently lacks the high-capacity customer presence seen in the rest of SBC's territory. As of 2Q98, e.spire is the sole competitor in El Paso.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
El Paso	71.6%	28.4%

Competitor

MSA	Competitor	Facility Type	Route Miles	Building on Network
El Paso	e.spire	Fiber	100	50

e.spire

e.spire is growing at a phenomenal rate. With the company's evolution from a CAP to a CLEC, e.spire was able to increase its revenues by 500% last year, grossing $59 million. El Paso is just one of 32 cities where e.spire provides integrated voice and data communications services. e.spire's one Lucent 5ESS-2000 switch in El Paso, which was turned up June 1, 1998, is collocated with the company's local fiber network and its national ATM backbone network. The company's 100% SONET network has been operational in El Paso since October 1995. The 100-mile network runs south of Interstate 10 to Hawkins and through the Butterfield Business Park, Fort Bliss, Biggs Airfield, Sierra Medical Center, Sunland Park, Northwestern Corporate Center, and Doniphan areas. The Lucent 5ESS 2000 is the latest in switching technology, capable of routing a variety of telephony services such as local, long distance and data services, and it has nine times the capacity of older model five series Lucent switches.

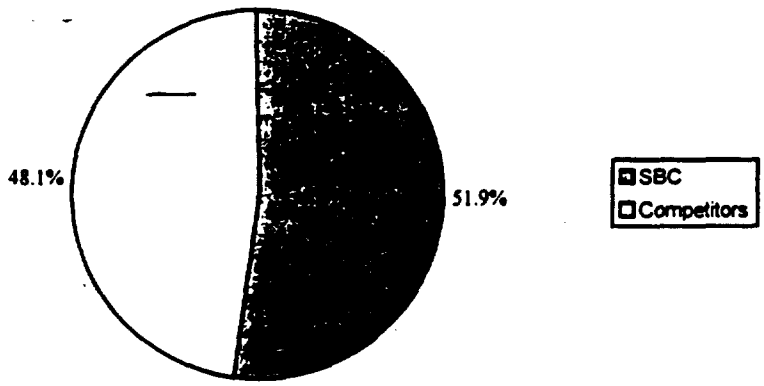
As e.spire continues expanding, the company intends to increase its depth in existing markets by bringing more buildings on-net. Currently, e.spire serves major commercial and government office buildings in El Paso, and, as of July of this year, the company has approximately 50 lit buildings.

HOUSTON – COMPETITIVE LANDSCAPE

Overview

While the industries of oil/gas exploration and chemicals/refining have traditionally made up the core of Houston's economy, this has become less and less the case during the last fifteen years. In 1998, the fastest growing segments of Houston's economy have been electronics, engineering/design services, and health care services. Additionally, the area's job growth for the period 1995-2005 is projected to be 332,780. Population growth in Houston for the same time period is projected to be 887,200. In recent years population's growth has been strong, adding about 2.5 percent more people per year between 1994 and 1997. The growth in these three industries as well as in population and jobs, will likely contribute to steady growth of the market in Houston during the coming years. Consequently, there is a demand for High Capacity services.

The four main competitors in the Houston market during the second quarter of 1998 were WorldCom, TCG, Time Warner, and MCI.



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
Houston	51.9%	48.1%

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Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
Houston	TCG	Fiber	600-800	unavailable
	MCI	Fiber	20	50
	WorldCom	Fiber	200	unavailable
	Time Warner	Fiber	400	unavailable
	GST Telcom	Fiber	8	unavailable

TCG

TCG was recently acquired by AT&T. The combined company will be able to offer facilities based competitive bundled services.

TCG upgraded its switch in the area from a Nortel DMS-100 to a DMS-500. Depending on call configuration, the DMS-100 is capable of handling between 1,000 and 100,000 lines. The DMS-500 can now handle from 480 to 10,000 trunks and can serve up to 1.5 million call attempts during the busiest hour of the day.

The company's network has between 600 and 800 route miles in the Houston area. TCG runs a Network Operations Center in Staten Island, NY from which it constantly monitors networks and coordinates responses to problems.

TCG began offering its ISP service, CERFnet, in Houston during the second quarter of 1998. The company provides a direct connection to the Internet backbone and a full range of Internet-related services for corporate clients. The Internet backbone is self-healing and supports speeds up to OC-3. Additionally, the service can be used with high-speed frame relay and ATM for data. Dedicated web server hosting is another available feature.

MCI

WorldCom recently acquired MCI. The new entity is MCI WorldCom. Although MCI has been offering connectivity services in the greater Houston area for the past three years, it only rolled out local exchange services in the third quarter of 1997. MCI operates a fiber network in Houston's central business district primarily designed to serve the larger, communications-intensive businesses located in multi-tenant buildings. The network currently extends approximately 20 route miles. It consists of no fewer than two interconnected fiber rings featuring route and central office diversity as well as electronic redundancy to reroute traffic. The company uses a Nortel DMS-100 switch that it installed in 1997. It can handle between 1,000 and 100,000 lines and serve up to 1.5 million call attempts during the busiest hour of the day. Unlike the WorldCom and TCG networks, MCI's network is in one area and relies on other carriers to connect its customers to the MCI central office via leased T-1 facilities. Additionally, MCI resells local services to customers located in outlying suburbs.

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As stated, MCI's network is concentrated in Houston's central business district. It currently connects more than 50 multi-tenant buildings and passes several more. MCI does not connect a building to its network before it has secured a long-term local or high capacity account in the building. MCI generally targets the large business market and its existing long-distance customer base for local exchange services

WorldCom

WorldCom recently completed its acquisition of MCI. The new entity is MCI WorldCom.

WorldCom (formerly Brooks) activated its Nortel DMS-500 switch in the area in January of 1998 and offers a variety of high capacity services. Their network in Houston extends 200 route miles. The switch can handle from 480 to 10,000 trunks and can serve up to 1.5 million call attempts during the busiest hour of the day. Additionally, it can handle 1,000 to 100,000 lines, depending on how it is configured.

Time Warner

Time Warner has been offering local switched services since the third quarter of 1997. The company operates one of the larger networks in the area.

Time Warner has been providing local switched services in Houston since September of 1997. Their network consists of more than 400 route miles of fiber. The company operates a Lucent Technologies 5ESS switch. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services.

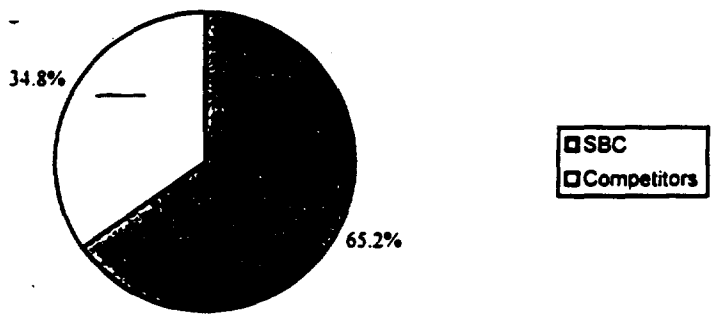
GST

GST activated its Siemens Class 5 switch in Houston in March of 1998. Their area network currently consists of 8 route miles. Siemens Class 5 switches are capable of supporting ISDN, Advanced Intelligent Network, advanced business and residential services, advanced Centrex, automatic call distribution, and PCS.

SAN ANTONIO – COMPETITIVE LANDSCAPE

Overview

San Antonio is the tenth largest city in the U.S. and home to five of the largest military installations in the nation. It is also the industrial, trade, and financial center of an agricultural region. The population of the greater San Antonio area is approximately 1.5 million people. In recent years the city has been aggressively encouraging corporate relocations. Consequently, numerous corporate campuses and telemarketing centers have been developed in northwest San Antonio. An economic characteristic that sets San Antonio apart from the rest of the country for enterprises such as telemarketing centers is its cheap and ample labor. 33% of its labor force is less than 20 years old, compared with 29% nationally. This translates into tens of thousands of new workers entering the labor market each year which has helps the city attract this kind of business. Assuming this trend continues, the growth of the High Capacity market in San Antonio will be healthy in the years to come. Competitors include Time Warner, WorldCom, MCI and ICG ChoiceCom



Source: QUALITY STRATEGIES, Washington, D.C.

MSA	SBC	Competitors
San Antonio	65.2%	34.8%

Competitors

MSA	Competitors	Facility Type	Route Miles	Building on Network
San Antonio	Time Warner	Fiber	500	180
	WorldCom	Fiber	80	25
	MCI	Fiber	unavailable	unavailable
	ICG ChoiceCom	Fiber	unavailable	unavailable

Time Warner

Time Warner was the most formidable competitor during the second quarter of 1998. Currently, Time Warner Communications' fiber facilities are far more extensive than those operated by other providers in the area. At present, its network encompasses 500 route miles of fiber capable of serving San Antonio's central business district as well as several business-intensive suburban areas including the San Antonio International Airport vicinity, Alamo Heights, Balcones Heights, Leon Valley, and Kirby. Additionally, Time Warner's network connects approximately 180 single and multi-tenant buildings both inside the city as well as in the suburbs. Time Warner operates its network operations center in the greater Denver area, from which it monitors all of its networks continuously. The company believes that this establishment is a preventative measure to keep network outages from affecting customers' communications ability.

Time Warner personnel feel that the company's network is more reliable than any other in San Antonio. The network is made up of 5 SONET rings, 3 of which run at OC-48 and 2 of which run at OC-12. Company representatives estimate the portion of network capacity currently utilized to be approximately 25%. Time Warner constructs all of its metropolitan area networks according to SONET ring architecture allowing for route diversity and the ability to reroute traffic electronically in the case of a fiber cut. Time Warner is so confident about its network's capabilities that it will switch unsatisfied customers back to their original providers and incur the costs for doing so (within the first 90 days of service). Time Warner has been in San Antonio's High Capacity market for the past five years, although it only began offering local services this year.

Time Warner routes local exchange traffic with a Lucent 5ESS located in its central equipment site at 100 Taylor Street. The Lucent 5ESS switch can be configured to handle as many as 100,000 trunks. It can also be specially engineered to provide capacity in excess of 100,000 trunks. Additionally, it can handle between a few hundred and 200,000 subscriber lines. The 5ESS is capable of switching ISDN voice and data, local voice calls, long distance calls, Internet access, wireless PCS, Advanced Intelligent Network services, interactive video and multimedia services.

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WorldCom

Yet another formidable competitor in the greater San Antonio area is WorldCom (formerly Brooks). WorldCom acquired Brooks Fiber earlier in the year and MCI recently.

WorldCom became a player in the market in March 1997 when it purchased the Texas networks owned and operated by Metropolitan Access Networks (MAN). Currently, WorldCom operates a network in the area measuring approximately 80 route miles and connecting approximately 25 buildings; mostly in San Antonio's central business district.

WorldCom has a Nortel DMS-500 switch that can now handle from 480 to 10,000 trunks and can serve up to 1.5 million call attempts during the busiest hour of the day. Additionally, it can handle 1,000 to 100,000 lines, depending on how it is configured. Generally, WorldCom's networks boast backbone speeds up to OC-48 and are constructed according to SONET ring architecture. WorldCom rarely (if ever) experiences network downtime; largely due to the way the network has been built. All backbone and distribution rings feature diverse routes in case a problem arises with one of them. Additionally, the network features electronic redundancy and backup power supplies to reroute traffic in the event of a fiber cut (generally within milliseconds).

One of the company's competitive advantages is its ability to offer seamless customer service once the relationship has been established. WorldCom monitors all of its networks from its St. Louis headquarters 24 hours a day, seven days a week. The company hopes this will allow it to catch mistakes before its customers do and lose the ability to communicate for even a few seconds.

Because it has not connected a large number of buildings to its network in San Antonio, WorldCom provides both facilities-based and resold services. Business development professionals estimate that approximately 25-35% of all local customers receive resold lines from one provider or another. However, WorldCom hopes to migrate the majority of these customers over to its own facilities in the near future as it expands its network.

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MCI

Late in 1997, MCI entered the San Antonio communications market when it established fiber facilities in the central business district.

In November of 1997, MCI became the first interexchange carrier to enter the San Antonio local service market when it turned up its fiber network downtown. Almost exclusively, MCI installs facilities downtown to serve its largest customers via its own facilities end-to end. The company's local networks primarily target the buildings of its largest customers. MCI offers those customers local service at a discount. Early in the fall of 1997, MCI entered the local switched market by reselling Southwestern Bell local access lines in anticipation of its own facilities-based rollout. Primarily, MCI markets local services to larger business customers with whom it already has long distance relationships. Account representatives in other markets have reported long distance customers to be an excellent sales channel for switched and high capacity services.

In San Antonio, MCI's downtown network features two self-healing SONET rings with backbone speeds up to OC-48 (although the vast majority of customers utilize DS-3 or OC-3 interfaces at their buildings). MCI has been using a DMS-100 switch that is capable of handling between 1,000 and 100,000 lines and can serve up to 1.5 million call attempts during the busiest hour of the day. The network backbone features transmission speeds up to OC-48, route and central office diversity, electronic redundancy, and backup power supplies.

ICG ChoiceCom

ChoiceCom, a new partnership between CSW and ICG Telecom, could pose one of the most significant threats to SBC in the greater San Antonio area. The alliance was announced in 1997 and San Antonio became one of the joint venture's first markets. In January of this year, ChoiceCom turned up its first two switches in the state of Texas, one in San Antonio and the other in Austin. It now markets local exchange service, high capacity, data services, internet access, and long distance over its own facilities to customers located on or near its San Antonio fiber network. ChoiceCom executives indicate that the company's target market base consists primarily of small and medium businesses; which stands in contrast to ICG's traditional base of large businesses and interexchange carriers. ChoiceCom offers facilities-based and resold services.

ChoiceCom could pose a long-term threat to SBC's market share in the region for a number of reasons. First of all, there seems to be a synergy between each company's core competencies. ICG has proven itself a capable competitor in numerous markets and generated substantial market share in California and Colorado. Additionally, CSW has acquired rights of way throughout the metro area and installed dark fiber across the state of Texas. ICG has shown a propensity to partner with electric utilities in order to establish its facilities rapidly and begin working on its market presence.

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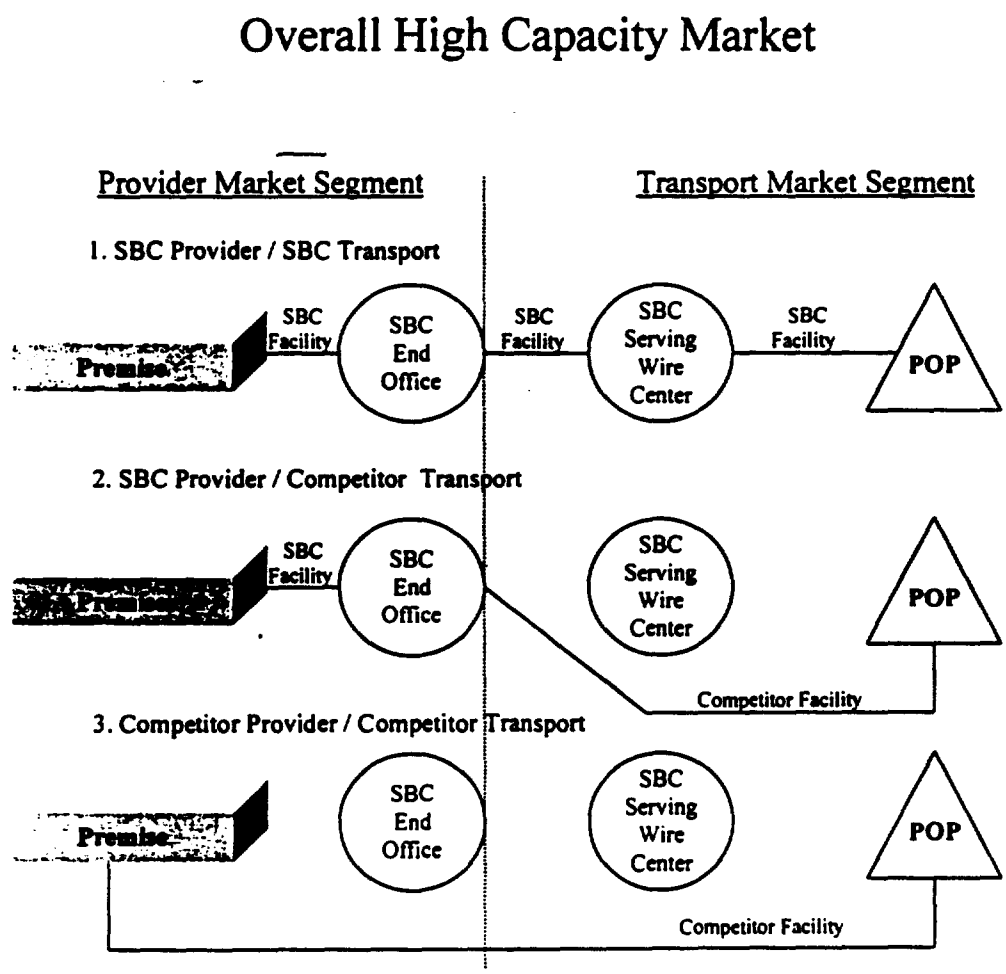
METHODOLOGY

QUALITY STRATEGIES believes that quantitative market share data can be coupled with qualitative competitive data to accurately describe and assess the market for high capacity circuits. The information that is provided in each section is designed to supplement that from the other. This analysis is based on primary and secondary market research conducted for SBC. Market Share estimates reflect second quarter, 1998 analyses. Overall Provider estimates are based on a 95% confidence interval with a ±5% margin of error. Transport market share estimates are primarily the result of extensive competitive research.

To formulate market share estimates, QUALITY STRATEGIES considered several inputs. Results are primarily based on primary, market research surveys that elicit share figures based on end user data. Additionally, QUALITY STRATEGIES analysts conducted an exhaustive competitive research analysis to gather additional information about each market examined.

The following diagram depicts the various components of the Overall High Capacity Market, which is the combination of the Provider and Transport Market segments.



PROVIDER MARKET SEGMENT

The Provider Market segment is defined as DS1 and DS3 service provided by SBC or a Competitor over its own facilities.

Market share results for the Provider Market segment are primarily based on actual usage obtained from surveys. Other sources of market share results include historical trend analysis and competitor research. Market share results for this project are based on customer usage as of the second quarter of 1998. The following steps illustrate our process for delivering Provider market share results for SBC:

Step 1: Competitor and Industry Analyses

Multiple inputs to sampling approach and sample plan, including competitor research, proprietary regional and national databases, and pre-survey screeners.

Step 2: Establish Sample Plan and Quotas

Develop preliminary market share estimates, establish quotas for appropriate strata, including high penetration and low penetration strata, and sub-strata (demographics, spending levels, etc.).

Step 3: Develop and Select Sample

Develop and select stratified random sample from sampling frame constructed from multiple sources, including third-party lists of businesses and proprietary databases.

Step 4: Conduct Fieldwork

Collect survey data and invoices. Based on the quotas established in the sampling plan, we conduct fieldwork to collect three inputs - short form surveys, long form surveys, and invoices - on which market share results ultimately are developed.

Achieve quotas for strata, and supplement with additional interviews for low incidence strata. Calibrate self-reported data with appropriate invoice bias factors.

Step 5: Analysis and Reporting

Analyze survey data and develop final results.

SAMPLING METHODOLOGIES

We develop our sampling plan using stratified random sampling techniques, which provide for efficient statistical estimates by designing the sampling plan based on particular strata (e.g., mix of utilization of competitors, demographic characteristics, geographic location, etc.) that we have developed and successfully applied over the past ten years. We utilize a mix of random and targeted surveys based on the stratified random sampling techniques. We use the random surveys to qualify respondents for different quotas established in our sampling plans. We also use the data obtained in the random surveys to establish weights for different strata when we reconstitute market share results.

STATISTICAL VALIDITY

This project is designed to provide estimates of high capacity (DS-1 and above) shares that are statistically valid for SBC'S Provider high capacity services compared to competitive alternatives.

High Capacity Provider market share results are designed on a 95% confidence level with ±5% margins of error. Our survey results may have error margins as low as ±2.4% on a 95% confidence interval.

INTERVIEW PROCESS

In order to obtain the most useful information, we interview the decision-makers of telecommunications services. For many businesses, these decision-makers may be Office Managers, Operations Managers, LAN/MIS Managers or even Owners.

We use our standard high capacity provider survey to collect data from business customers. QUALITY STRATEGIES surveyed business customers regarding their usage of high capacity DS-1 and DS-3 services. The survey includes questions on all competitive DS-1 and DS-3 services, including competitor fiber-based services, microwave services, satellite services, and customer-owned facilities. We also use surveys to collect demographic information, perception data, and any other pertinent information.

TRANSPORT MARKET SEGMENT

The Transport Market segment is defined as DS1 and above service provided to carriers by SBC or a competitor over its own facilities. Data for transport market share is based on the following sources:

1. **IXC Interviews:** IXC interviews provide insight into specific usage of both competitor (CAP/CLEC) and SBC-provided Transport circuits. Representatives of the following IXCs were interviewed for this report:
   - AT&T
   - Cable & Wireless
   - Frontier
   - LCI
   - MCI
   - Sprint
   - WorldCom
   - Others

2. **Competitor Interviews:** Competitor interviews provide information regarding the number of stand alone Transport circuits and circuits riding on the Transport facilities to the IXC POPs. Representatives of the following competitors (CAP/CLECs) were interviewed for this report:

- Cox
- e.spire
- ELI
- GST
- ICG
- ICI
- MCI (formerly MCIMetro)
- Nextlink
- TCG
- Time Warner
- WorldCom

3. **Competitive Analysis:** Competitive analysis of leading IXC and other transport customer usage provide valuable insight into the market share between SBC and competitors. In addition, QUALITY STRATEGIES' utilized competitor and IXC profiles database, SBC historical transport and DS1/DS3 provider market shares, and transport and DS1/DS3 provider market shares of other RBOCs to provide further insight into the market share between SBC and competitors.

OVERALL HIGH CAPACITY MARKET SHARE

The Overall High Capacity Market is defined as DS1 and above service provided by SBC or a competitor over its own facilities. The Overall High Capacity market share is based on combining Provider and Transport Market shares. In developing SBC's Overall High Capacity Market Share, QUALITY STRATEGIES established unique weights for each metro. To develop these weighting factors, QUALITY STRATEGIES evaluated available information on historical equivalent circuit market sizes for DS1/DS3 Provider and Transport markets. QUALITY STRATEGIES also evaluated in-house, proprietary data on similar metros. For many years, QUALITY STRATEGIES has tracked the High Capacity market for other RBOC clients. Thus, we have equivalent circuit market size information for a number of metros. Using population, other demographic information, the number of existing competitors, the status of market share erosion, and other factors, QUALITY STRATEGIES evaluated similarities between a SBC metro and other RBOC metros. In many instances, similarities can be found in more than one metro. In addition, competitor information was evaluated and incorporated. QUALITY STRATEGIES has been tracking competitors across the country for over 10 years. Our internal databases on competitors provide valuable inputs. All of these inputs have been considered in the development of unique weights for each SBC metro.

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Washington, D.C.
(703) 610-1000

MARKET SHARE BASED ON EQUIVALENT CIRCUITS VS. REVENUES

It has been our experience for over 10 years that a greater level of accuracy is achieved by conducting market share analysis by equivalent circuits.

The key issue is whether there would be a significant difference in market share depending on how it was measured: in terms of equivalent circuits or in terms or revenues. Our experience in this area has been that in established DS1/DS3 Provider and Transport Markets, where the competitors have been in the market for a few years, we find that the competitors, in some instances, have charged a premium price. This would translate to greater erosion in market share for RBOCs if analyzed in terms of revenues than in terms of equivalent circuits.

In emerging DS1/DS3 Provider and Transport Markets, where the competitors are just entering the market, we find that the competitors undercut RBOCs on price. This would translate to less erosion in market share for RBOCs if analyzed in terms of revenues than in terms of equivalent circuits.

We find that there would be a difference in market share between revenue measurement and equivalent circuit measurement. How much of a difference would depend on the specific conditions in the marketplace. It is heavily dependent on the pricing strategy of the competitors, which are affected by many factors including the network utilization level, the geographic location, and the number and overall strategy of the existing competitors. There would thus be an increased volatility in market share if measured in terms of revenues than in terms of equivalent circuits.

In general, we have found that the share difference between revenue measurement and equivalent circuit measurement to be relatively small and would not change the direction the market is headed.

COMPETITIVE LANDSCAPE

The competitive landscape is comprised of information gathered by QUALITY STRATEGIES' analysts. Competitive information is gathered from numerous sources (both primary and secondary) including the following:

- Interviews with competitors and IXC professionals, including marketing, sales, administrative, executive, and technical personnel
- Interviews with large business end users
- Interviews with equipment vendors and equipment retailers
- Secondary market research including on-line sources and public information
- QUALITY STRATEGIES' extensive, national competitor database that has been maintained and updated continuously over the last ten years

CAPABILITIES AND EXPERIENCE

QUALITY STRATEGIES is a research and consulting firm working exclusively in the telecom industry. QUALITY STRATEGIES has provided competitive market information, including market share results and competitive market data to every RBOC and large LEC for the last decade. QUALITY STRATEGIES maintains its own professional team of analysts, methodologists, client service personnel and calling centers focused exclusively on the telecommunications market.

Certificate of Service

I, Mary Ann Morris, hereby certify that the foregoing "Direct Case and Comments of SBC Communications, Inc." in CC Docket No. 98-166 has been served on January 19, 1999 to the Parties of Record.

Mary Ann Morris

January 19, 1999

SECRETARY
FEDERAL COMMUNICATIONS COMMISSION
THE PORTALS
445 TWELFTH STREET, S.W.
WASHINGTON DC 20554

ITS
1231 20TH STREET, N.W.,
WASHINGTON DC 20036